VI. A list of the Lepidoptera of the Khasia Hills. Pt. II. By Colonel Charles Swinhoe, M.A., F.L.S.

[Read Oct. 18th, 1893.] .

PLATE II.

HETEROCERA.

I.

In arranging the order in which the Heterocera should stand I have been working on the lines set forth in Mr. Hampson's excellent classification in Faun. Brit. Ind., but I cannot altogether follow the order in which he has, for the sake of convenience, put the different families, and prefer dividing them into three groups.

- 1st. Fore wing with vein 5 (lower radial) from centre of discocellulars, or nearer 6 than 4.
- 2nd. Fore wing with vein 5 from lower angle of cell, or nearer 4 than 6.
- 3rd. Fore wing with veins 4 to 11 arising from the cell at almost even distances apart.

GROUP I.

Sub Gi	oup 1.	No. 1.	. Sphingidæ	- Frenulum present.
,,	2,	,, 1	. Saturniidæ	-)
		,, 2	. Brahmæidæ	-}Frenulum absent.
		- ,, - 3.	Bombycidæ	- Frendium absent.
,,	3.		. Eupterotidæ	_}
,,	4.	1.	Notodontidæ	-) 77
,,,			. Cymatophoric	$\left \frac{1}{2}\right $ Fremulum present.
,,	5.		. Epicopiidæ	- Frenulum rudi-
		,, 2.	$\overline{Uraniid}x$	-> mentary or ab-
		<u> </u>	Microniidæ	-) sent.
			. Epiplemidæ	- Frenulum present.
,,	6.	,, 1	Geometers	- Frenulum present.

GROUP II.

Sub Group 1. No. 1. Callidulida - Frenulum sometimes present sometimes absent.

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Sub Group 1. No. 3. Limacodida
                  4. Lymantriidæ
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                  5. Hypsida
                                     Frenulum present.
                  6. Arctiidæ
                  7. Agaristida
               . .
                  8. Castniida
                  1. Lasiocampida: - Frenulum absent.
    ,,
                  2. Pterothysanida
                  1. Psychida:
               ,,
                                   Frenulum present.
                  2. Cossida -
               ,,
                  1. Arbelida
                                   Frenulum absent.
    ,,
                  2. Hepialidæ
                  1. Syntomidæ
                                    Frenulum present.
    2.2
                  2. Zygaenidæ
                                     Frenulum present.
                  1. Noctuidæ
                  1. Thyrididæ
                                   Frenulum present.
    ,,
                  2. Pyralida
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GROUP III.

Group I.

Sub Group I.

Family SPHINGIDÆ.

Sub Family ACHERONTIINÆ.

Genus Acherontia, Ochsen.

- 1. A. styx, Westw., Cab. Or. Ent., p. 88, pl. 42, fig. 3.
- 2. A. lachesis (Fabr.), Ent. Syst. Suppl., 434, 26, 27 (1798).

A. morta, Hübn., Verz., p. 140 (1816).

Sub Fam. SMERINTHINÆ. Genus Langlia, Moore.

L. zeuzeroides, Moore, P. Z. S., 1872, p. 567.
 L. khasiana, Moore, l.c., p. 568.
 Recorded from the Khasias; not received by me.

Sub Fam. AMBULYCINÆ.

Genus Calymnia, Walker.

4. C. panopus (Cram.), Pap. Exot., iii., p. 50, pl. 224, figs. A, B (1779).

Recorded from the Khasias.

Genus Ambulyx, Westw.

- 5. A. substrigilis, Westw., Cab. Or. Ent., p. 61, pl. 30, fig. 2 (1848).
 Shillong and Cherra Punji.
- A. semifervens (Walker), xxxi, p. 38 (1864).
 A. turbata, Butler, P. Z. S., 1875, p. 252.
 Cherra Punji.
- 7. A. deucalion (Walker), viii., p. 236 (1856). Recorded from the Khasias.
- 8. A. gigantea, Rothschild, Nov. Zool., i., p. 96 (1894). Recorded from the Khasias.

Sub Fam. CHÆROCAMPINÆ.

Genus Acosmeryx, Boisd.

- 9. A. sericeus (Walker), viii., p. 181 (1856). Many examples; Shillong.
- A. cinerea, Butler, P. Z. S., 1875, p. 245.
 Several examples; Shillong and Cherra Punji.
- 11. A. naga, Moore, Cat. Lep. E. I. C., i., p. 271 (1857).

Shillong and Cherra Punji. Out of the numerous specimens of this genus received there has not been a single typical anceus, Cram. Hampson has put these four very distinct species together; they appear to me to be very distinct, easily distinguishable and without intermediate forms.

Genus CHÆROCAMPA, Dup.

- 12. *C. macromera*, Butler, P. Z. S., 1875, p. 7. Shillong.
- C. alecto (Linn.), Syst. Nat., i., p. 803 (1767).
 Common.
- 14. C. theylia (Linn.), l.c.
 C. rafflesii, Butler, Trans. Zool. Soc., 1876, p. 556.
 Examples of both forms of this species.
- 15. C. oldenlandiæ (Fabr.), Sp. Ins., ii., p. 148 (1781). Common.
- C. vagans (Butler), Ill. Typ. Lep. Het. B. M., v., p. 4, pl. 78, fig. 7 (1881).
 One example; Shillong.
- 17. C. mydon (Walker), viii., p. 155 (1856). Three examples; Shillong.
- C. olivacea (Moore), P. Z. S., 1872, p. 567.
 Common.
- C. velata (Walker), xxxv., p. 1853 (1866).
 Pergesa aegrota, Butler, P. Z. S., 1875, p. 246.

Metopsilus albomarginatus, Rothschild, Nov. Zool., i., p. 78 (1894).

Shillong and Cherra Punji; in great numbers. Hampson has included aurifera, Butler, and acuta, Walker, with this species; they appear to me to be distinct; they have broad pale yellow prominent bands on each side of the thorax, a character wanting in velata. The form albomarginatus is not uncommon in the Khasias; I cannot see how it can be separated from velata: in this variable species there are scarcely any two examples identical.

20. C. castor (Walker), viii., 153 (1856).

Many examples, a common species in the Khasias; omitted by Hampson. I have it from both Shillong and Cherra Punji, it seems to be a link between *velata* and

olivacea, having the colouration of the former with the white marginal suffusion on the fore wings above, of the latter.

21. C. busiris (Walker), viii., p. 158 (1856).

Panacra hamiltoni, Rothschild, Nov. Zool., i., p. 82.

Cherra Punji.

The type specimen is much faded, but I have a fine series and feel certain of my identification.

22. C. helops (Walker), viii., p. 180 (1856).

Philampelus orientalis, Felder, Reise Nov. Lep., pl. 77, fig. 1 (1874).

One example; Shillong. The type of *helops* is recorded from Port Natal, which must be a mistake.

23. C. clotho (Drury), Ill. Exot. Ins. ii., p. 48, pl. 28, fig. 1 (1773).

Sphine butus, Cram., Pap. Exot., ii., p. 88, pl. 152 (1777).

Deilephila cyrene, Westw., Cab. Or. Ent., p. 13, pl. 6, fig. 1 (1848).

Many examples. The type of cyrene is in O. M.; it is identical with clotho.

24. C. punctivenata, Butler, P. Z. S., 1875, p. 248.

Many examples. I have both sexes from Cherra Punji. It should not be confounded with *clotho*. Gonograpta from Southern India also appears to be a good species. I have a long series in my Museum.

- 25. C. lineosa, Walker, viii., p. 144 (1856).
- 26. C. major, Butler, P. Z. S., 1875, p. 249.
- 27. C. minor, Butler, l.c.

Shillong and Cherra Punji; in great numbers. At first I put them together, following Hampson, but with the numbers now before me I cannot do so. They are undoubtedly somewhat alike, as are all the species of this group, but each has its own distinctive wing markings, and major has a pale yellowish broad longitudinal shade, central on forewings, discal on hindwings, which is very characteristic.

28. *C. pallicosta*, Walker, viii., p. 145 (1856). Three examples; Shillong.

Genus Daphnis, Hübn.

29. D. nerii (Linn.), Syst. Nat., i., 2, p. 798 (1767). Recorded from Khasias.

30. D. bhaga, Moore, P. Z. S., 1865, p. 794. Numerous specimens from Shillong and Cherra Punji.

Genus Theretra, Hübn.

31. T. nessus (Drury), Ill. Ins. Exot., ii., p. 46, pl. 27, fig. 1 (1773).

Shillong and Cherra Punji.

32. T. actea (Cram.), Pap. Exot., iii., p. 93, pl. 248, fig. a (1779).

Genus Elibia, Walker.

33. E. dolichus (Westw.), Cab. Or. Ent., p. 61, pl. 30, fig. 1 (1848).

Shillong and Cherra Punji.

Sub Fam. SPHINGINÆ.

Genus Protoparce, Burmeister.

34. *P. orientalis*, Butler, Trans. Zool. Soc. 1876, p. 609, pl. 91, figs. 16, 17 (larva).

Common.

Genus Pseudosphinx, Burmeister.

- P. inexacta (Walker), viii., p. 208 (1856).
 Many examples.
- 36. P. fo (Walker), viii., p. 195 (1856). Shillong and Cherra Punji.
- 37. P. discistriga (Walker), viii., p. 209 (1856). Common.

38. P. khasianum (Rothschild), Nov. Zool., i., p. 90 (1894).

Recorded from the Khasias; must be closely allied to if distinct from the preceding which is a very variable species.

Genus Nephele, Hübner.

39. N. hespera (Fabr.), Syst. Ent., p. 546 (1775). Recorded from the Khasias.

Genus Apocalypsis, Butler.

40. A. velov, Butler, Trans. Zool. Soc., 1876, p. 641. One example; Shillong.

Genus Pseudodolbina, Rothschild.

41. P. velovina, Rothschild, Nov. Zool., i., p. 91, pl. 6, fig. 18 (1894).

Recorded from the Khasias.

Sub Fam. MACROGLOSSINÆ. Genus Gurelca, Kirby.

42. G. hyas (Walker), viii., p. 107, 1856. Shillong.

43. G. masuriensis (Butler), P. Z. S., 1875, p. 244, pl. 3663.

Numerous specimens, the common form apparently. I have received it from both Shillong and Cherra Punji.

Genus Rhopalopsyche, Butler.

44. R. nycteris (Kollar), Hüg. Kasch., iv., 2, p. 458, pl. 19, fig. 5 (1844).

Cherra Punji.

Genus Macroglossa, Scop.

45. M. belis (Cram.), Pap. Exot., i., p. 147, pl. 94, fig. c (1776).

Common.

 M. gilia, Herr Schüff., Samml. Ausser. Eur. Schm., pp. 59, 79, pl. 23, fig. 107 (1850).

Several examples.

- 47. *M. proxima*, Butler, P. Z. S., 1875, p. 4, pl. 1, fig. 1. Three examples; Shillong.
- 48. M. imperator, Butler, P. Z. S., 1875, p. 243, pl. 37, fig. 4.

 Cherra Punji.

Genus Cephnodes, Hübn.

49. C. hylas (Linn.), Mant., i., p. 539 (1771). Recorded from the Khasias.

Genus Sataspes, Moore.

50. S. infernalis (Westw.), Cab. Or. Ent., p. 61, pl. 30, fig. 3 (1848).

Sub Group II.

Fam. SATURNIIDÆ.

Genus Actias, Leach.

- A. selene (Hübn.), Samml. Exot. Schm., i., pl. 172, fig. 3 (1806-19).
- 52. A. mænas, Double., Ann. Mag. N. H., xix., p. 95, pl. 7, fig. 1 (1847).Common.

Genus Attacus, Linn.

- 53. A. atlas, Linn., Mus. Lud.-Ulr., p. 366 (1764). Common.
- 54. A. edwardsi, White, P. Z. S., 1859, p. 115, pl. 57. Shillong and Cherra Punji.
- 55. A. cynthia, Drury, Exot. Ins., ii., pl. 6, fig. 2 (1773). Very plentiful.
- A. ricini, Boisd., Ann. Soc. Ent. Fr. (3), ii., p. 755 (1854).

Genus Antheræa, Hübn.

- 57. A. roylei, Moore, P. Z. S., 1859, p. 256, pl. 64, fig. 1. Cherra Punji.
- 58. A. paphia (Linn.), Syst. Nat., i., p. 809 (1767). Cherra Punji.
- 59. A. helferi, Moore, P. Z. S., 1859, p. 257, pl. 64, fig. 2. Cherra Punji.
- 60. A. knyvetti, Hampson, Faun. Brit. Ind. Moths, i., p. 19 (1892).

One female; Shillong.

This species has been in my collection for some years under Moore's M.S. name of tumida.

Genus Saturnia, Schrank.

61. S. extensa (Butler), Ill. Typ. Lep. Het. B. M., v., p. 61, pl. 94, fig. 2 (1881).

Two examples; Shillong.

Genus LOEPA, Moore.

62. L. katinka (Westw.), Cab. Or. Ent., p. 25, pl. 12, fig. 2 (1848).

Numerous examples.

Genus Salassa, Moore.

- 63. Salassa megastica, sp. n.
- much larger, the antemedial line of forewings much closer to the base, white outwardly edged with brown, very much outwardly curved and runs close into the base on the hinder margin; the hyaline spot is large, ringed with a black and a white line deeply excavated on the outer side, the excavation filled up by a deep black patch; on the hindwing the difference is greater, the hyaline spot is larger than on the forewings, but of a similar nature, the rings round it are black, white, and again black, then a broad light red space, which on the outer side is very broad and extends well beyond the discal black and white spotted band, which is thin in the disc and curves broadly round the ocellus, the space between it and the red portion being filled in with dark grey; halfway

Three males and one female, from Cherra Punji.

Genus CRICULA, Walker.

64. C. trifenestrata (Helfer), Journ. As. Soc. Beng., vi., p. 45 (1837).

Common.

Fam. BRAHMÆIDÆ.

Genus Brahmæa, Walker.

B. wallichii, Gray, Zool. Misc., p. 39 (1832).
 Many examples; Shillong and Cherra Punji.

66. B. hearsayi, White, Proc. Ent. Soc., 1861, p. 26. Eleven examples; Shillong.

Fam. BOMBYCIDÆ.

Genus Ocinara, Walker.

67. O. signifera (Walker), Journ. Linn. Soc., vi., p. 130 (1862).

Shillong and Cherra Punji.

68. O. cyproba, sp. n. (Pl. II., fig. 1.)

Many males and two females, from Cherra Punji and Shillong.

Far more thinly clothed than O. signifera, and without any spots.

69. O. apicalis, Walker, Journ. Linn. Soc., vi., p. 130 (1862).

Shillong and Cherra Punji.

Sub Group III.

Fam. EUPTEROTIDÆ.

Genus Gangarides, Moore.

70. G. roseus (Walker), xxxii., p. 513 (1865). Two males and one female, Cherra Punji.

Genus DREATA, Walker.

71. D. hades, Walker, iv., p. 908 (1855).

Shillong and Cherra Punji. Many males and females. The females only differ from the males in their larger size and brighter colour, having sometimes a reddish tinge.

Genus Palirisa, Moore.

72. P. lineosa (Walker), iv., p. 912 (1855).

Shillong and Cherra Punji. One male and several females.

73. *P. cervina* (Moore), P. Z. S., 1865, p. 807. Shillong, one pair.

Genus Tagora, Walker.

T. patula, Walker, v., p. 1189 (1855).
 T. undulosa, Walker, v., p. 1196.
 Cherra Punji.

75. T. khasiana (Moore), Descr. Ind. Lep. Atk., i., p. 77, 1879.

Shillong and Cherra Punji.

76. T. pallida (Walker), iv., p. 912, 1855.

Sphingognatha asclepiades, Felder, Reise Nov. Lep., iv., pl. 94, fig. 1 (1868).

Cherra Punji.

I have received numerous specimens of patula and khasiana, and one male and two females of pallida.

Hampson puts the first two together, but there are undoubtedly three species and not two. There is a small pale fawn-coloured species, & 330, 94 inches in expanse of wings, similarly coloured in both sexes, identical with Moore's type of khasiana, very uniform in size; it has a black head and pale tuft of hairs at basal joint of antennæ. A medium sized form, $\delta 4 + 9 = 5$ inches, uniform in size, very variable in colour, from pale fawn colour to dark grey and dark reddish fawn colour in the male, always of the latter colour in the female, the females of which fairly well correspond to Walker's types of patula and undulosa. This species has also in the male a black head and pale tuft of hairs. Finally, there is a large species of which I have received only one male and two females, measuring, δ 5, Ω 6 inches. The male is coloured pale fawn colour like the males of pallida from Java and Malayana in my collection. It has an ochreous-red head and tuft of hairs a little darker than in the other species. The females are dark reddish-fawn coloured like the females of patula, and also identical in colour with Malayan and Javan females of pallida.

Genus Pseudojana, Hampson.

77. P. incandescens (Walker), iv., p. 910 (1855). Cherra Punji; two females.

Genus Ganisa, Walker.

78. *G. postica*, Walker, v., p. 1190 (1855). Shillong.

G. pandya (Moore), P. Z. S., 1865, p. 807.
 Shillong.

Genus APHA, Walker.

80. A. subdives, Walker, v., p. 1180 (1855). Shillong.

Genus Eupterote, Hübn.

81. E. lineosa (Walker), vi., p. 1440 (1855).
Murlida fraterna, Moore, Trans. Ent. Soc., 1884, p. 371.
Shillong.

82. E. calandra, sp. n.

 \circlearrowleft Q. Antennæ (of the male) with the plumes grey; palpi, head, and fore part of thorax ochreous; shaft of antennæ, body, and wings, above and below, bright citron-yellow, absolutely without any markings; thorax beneath and legs ochreous. Expanse of wings, \circlearrowleft $2\frac{\pi}{10}$, \circlearrowleft $3\frac{\pi}{10}$ inch.

Cherra Punji and Shillong. Numerous examples of both sexes. Antennæ of the male weak, with the pectinations short as in *E. geminata*, Walker, but the wings are broader, with margin of fore wings less oblique. The absence of all markings makes it very distinctive.

83. E. assimilis, Moore, Trans. Ent. Soc., 1884, p. 363. E. dissimilis, Moore, l.c., p. 368. Cherra Punji.

84. *E. testacea* (Walker), iv., p. 900 (1855). Shillong; common.

85. E. axesta, sp. n. (Pl. II., fig. 2.)

 $\upsignature{3}$. Plumes of antenne grey; palpi and head red-brown; body and wings above of a uniform sandy-yellow colour; wings crossed by several brown bands; first antemedial outwardly curved, indistinct, obsolete in hind wings; second medial, macular curved in on to the costa of fore wings, followed by three equidistant discal bands, outwardly curved, and composed of small spots. The last on hind wings is linear, a sub-marginal darker band of double lunules, which on hind wings is single and sinnous, cilia brown, underside darker, with the inner band obsolete on both wings; all the other bands present and prominent; legs pink-brown, covered with yellow hair; \upred pale reddish-brown, with the inner lines more or less obsolete. Expanse of wings, $2\frac{\pi}{10}$ inch.

Shillong and Cherra Punji; several examples.

Allied to *E. testacea*, but the bands on the latter are linear and mostly straight.

Genus Nisaga, Walker.

86. N. simplex, Walker, iv., p. 885 (1855).

Shillong and Cherra Punji.

The female of this species, of which I have received two, has simple antennae, the body is dark, the wings pale brickdust-colour, slightly tinged with pink.

Sub Group IV.

Fam. NOTODONTIDÆ.

Genus Tarsolepis, Butler.

87. T. fulgurifera (Walker), xiv., p. 1347 (1857). Cherra Punji; one example.

88. T. remicauda, Butler, Ann. Mag. N. H. (4), x., p. 125, pl. 8 (1872).

Shillong; one example.

Genus Dudusa, Walker.

89. D. nobilis, Walker, xxxii., p. 447 (1865). Shillong; one female.

This is the first record of this species within Indian limits; the type came from North China. I have it also from Celebes and Singapore.

Genus Baradesa, Moore.

90. B. lithosioides, Moore, P. Z. S., 1883, p. 17, pl. 5, fig. 2.

Shillong and Cherra Punji; numerous specimens.

Genus Phalera, Moore.

91. P. parivala, Moore, Cat. Lep. E. I. C., ii., p. 434 (1859).

Shillong and Cherra Punji.

92. P. raya, Moore, l.c., p. 434. Shillong and Cherra Punji.

Genus Gargetta, Walker.

93. G. costigera, Walker, xxxii., p. 455 (1865). Shillong and Cherra Punji; common.

94. G. curvaria, Hampson, Faun. Brit. Ind. Moths, i., p. 136 (1892).

Shillong.

Genus Turnaca, Walker.

95. T. delineivena, sp. n.

Q Palpi dark brown with pale tips to the hairs, antennæ reddish-brown, forewings and thorax grey, forewings with the median and outer veins dark brown and with brown bands on each of these veins, more broadly and better defined in the median vein along its whole length, hinder portion of the wing also suffused with brown, hindwings brown with pale costal margin. Expanse of wings, $2\frac{6}{10}$ inch.

Cherra Punji; two examples.

Genus Thacona, Walker.

Porsica, Walker.

96. T. ingens (Walker), xxxv., p. 1823 (1866). Shillong; two examples.

Genus Pydna, Walker.

P. testacea, Walker, vii., 1754 (1856).
 Common.

98. P. kamadena (Moore), P. Z. S., 1865, p. 812.

Shillong. I have both sexes of this species, it is quite distinct from the preceding, differing in size, markings, and colouration.

99. P. decurrens (Moore), Desc. Ind. Lep. Atk., i., p. 66 (1879).

The type came from Cherra Punji, not received by me.

100. P. notata, Swinh., Trans. Ent. Soc., 1891, p. 479, pl. 19, fig. 16.

Shillong; one example.

Hampson makes this a synonym of *P. pallida*, Butler, from Japan, but it cannot even belong to the same section of the genus, having simple antennæ in *both* sexes.

101. P. longivitta (Walker), vii., p. 1754 (1856). Shillong; two males, one female.

100 D 1 1

102. P. bela, sp. n.

Antennæ grey; upper side of palpi dark brown; underside

yellowish-grey; head, thorax, and forewings dark reddish-ochreous; abdomen and hindwings white, tinged with ochreous; forewings irrorated with brown atoms; these, clustered together, form a longitudinal fascia in the centre up to the apex and indications of another fascia below it; some indistinct brown spots in an outwardly curved line from centre of hinder margin towards apex, only apparent in one example; hind wings with the outer border tinged with red. Expanse of wings, $1\frac{\pi}{10}$ inch.

Cherra Punji; three examples.

Genus Ceira, Walker.

103. C. aurata (Moore), Descr. Ind. Lep. Atk., i., p. 64 (1879).

Recorded from the Khasia Hills, by Moore.

104. C. fasciata (Moore), l.c., p. 66. Shillong; two specimens.

Genus Somera, Walker.

105. S. viridifusca, Walker, iv., p. 882 (1855). Shillong and Cherra Punji; many examples.

Genus Cerura, Schrank.

C. liturata, Walker, v., p. 988 (1855).
 Shillong.

Genus Hyperæschra, Butler.

107. H. pallida, Butler, Ann. Mag. N. H. (5) vi., p. 65 (1880).

Shillong; numerous examples.

108. H. basalis (Moore), P. Z. S., 1865, p. 813.
Cherra Punji.

Genus Antheua, Walker.

109. A. servula (Drury), Ins. Exot., ii., p. 20, pl. 11, fig. 11 (1773).

Cherra Punji.

Genus Anticyra, Walker.

A. combusta, Walker, p. 1092 (1855).
 Cherra Punji.

Genus Fentonia, Butler.

111. F. argentifera (Moore), P. Z. S., 1865, p. 813. Cherra Punji.

Genus NETRIA, Walker.

112. N. viridescens (Walker), vi., p. 1504 (1855). Cherra Punji.

Genus Spatalia, Hübner.

113. S. argentifera (Walker), Journ. Linn. Soc., vi., p. 140 (1862).
Shillong.

114. S. auritracta (Moore), P. Z. S., 1865, p. 811. Shillong.

115. S. plusioides (Moore), Descr. Ind. Lep. Atk., i., p. 62 (1879).

Cherra Punji.

Genus Lophopteryx, Stephens.

116. L. ferruginosa, Moore, Descr. Ind. Lep. Atk., i., p. 67 (1879).

Cherra Punji.

Genus Besaia, Walker.

117. B. rubiginea, Walker, xxxii., p. 459 (1865). Recorded from the Khasias.

Genus Metaschalis, Hampson.

118. M. disrupta (Moore), Descr. Ind. Lep. Atk., i., p. 62 (1879).

Cherra Punji.

Genus Ichthyura, Hübner.

119. I. fulgurita, Walker, xxxii., p. 433 (1865). Shillong.

120. I. pallida (Walker), v., p. 1077 (1855).
Shillong, one example.

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Fam. CYMATOPHORIDÆ.

Genus Habrosyne, Hübner.

121. *H. indica* (Moore), P. Z. S., 1867, p. 44. Shillong.

122. H. armata, Moore, Descr. Ind. Lep. Atk., ii., p. 90 (1882).

Recorded from the Khasia Hills.

Genus THYATIRA, Hübner.

123. T. batis (Linn.), Syst. Nat., i., p. 836 (1735). Shillong and Cherra Punji.

Genus GAURENA, Walker.

124. G. florescens, Walker, xxxii., p. 620 (1865). Recorded from the Khasias.

Genus Polyploca, Hübner.

125. *P. albicosta* (Moore), P. Z. S., 1867, p. 45. Cherra Punji.

Sub Group V.

Fam. EPICOPIIDÆ.

Genus Epicæia, Westw.

126. E. polydora, Westw., Arcana Ent., p. 19, pl. 5, fig. 1 (1843).

Shillong and Cherra Punji.

127. E. varunea, Moore, P. Z. S., 1865, p. 799. Shillong and Cherra Punji.

Fam. URANIIDÆ.

Genus Nyctalemon, Dalman.

128. N. zampa, Butler, Ent. Mo. Mag., v., p. 273 (1868).

Shillong and Cherra Punji.

Fam. MICRONIIDÆ.

Genus Urapteroides, Moore.

129. U. astheniata (Guén.), Phal., ii., p. 24 (1857). Cherra Punji.

Genus Strophidia, Hübner.

130. S. fasciata (Cram.), Pap. Exot., ii., p. 12, pl. 104, fig. p (1779).
Shillong.

Genus Micronidia, Moore.

131. M. simpliciata (Moore), P. Z. S., 1867, p. 646. Cherra Punji.

Genus MICRONIA, Guén.

132. M. aculeata, Guén., Phal., ii., p. 12, pl. 13, fig. 8, 9 (1857).

M. gannata, l.c., p. 26, 3

M. sparsaria, Walker, xxiii., p. 818 (1861).

Shillong and Cherra Punji; common.

Genus Pseudomicronia, Moore.

133. P. cœlata, Moore, Descr. Ind. Lep. Atk., iii., p. 257 (1887).

Shillong; one example.

Genus Acropteris, Hübner.

134. A. striataria (Clerck.), Icon., pl. 55, fig. 4 (1759). Shillong and Cherra Punji.

135. A. iphiata (Guén.), Phal., ii., p. 29 (1857).

Micronia pontiata, Guén., l.c.

M. convexaria, Walker, xxiii., p. 819 (1861).

Common.

The type of convexaria came from Landoor, it was omitted from Cotes and Sunbury's catalogue by oversight.

136. A. ciniferaria (Walker), xxxv., p. 1642 (1866).

Micronia obliquaria, Moore, P. Z. S., 1877, p. 622, pl. 60, fig. 17.

Shillong and Cherra Punji.

The type of *ciniferaria* from Siam is in the O.M., the type of *obliquaria* is from the Andaman Islands; they are not separable.

137. A. vagata (Moore), P.Z. S., 1877, p. 622, pl. 60, fig. 18.

Shillong.

Genus Auzea, Walker.

138. A. rufifrontata, Walker, xxvi., p. 1487 (1862). Cherra Punji.

Genus Chatamla, Moore.

139. C. flavescens (Walker), ii., p. 406 (1854). Shillong.

Fam. EPIPLEMIDÆ.

Genus Amana, Walker.

140. A. angulifera, Walker, iii., p. 662 (1855). Shillong and Cherra Punji.

Genus Decetia, Walker.

141. D. mimicusaria, Walker, xx., p. 95 (1860). Shillong and Cherra Punji; several examples.

Genus Paradecetia, Nov.

With the veination of *Decetia*, but with very different antennæ. In *Decetia* the antennæ are pectinated in both sexes. In this genus the antennæ of the male are dentated, the teeth with flat ends and very close together; in the female the rudiments of the dentations only are present.

142. *P. albistellaria* (Walker), xxvi., p. 1522 (1862). Shillong and Cherra Punji.

I have it also from the Shan States (Manders). The type is in B.M., without locality.

Genus Epiplema, Herr Schäff.

143. E. reticulata (Moore), Descr. Ind. Lep. Atk., iii., p. 259 (1887).

Shillong.

144. E. himala (Butler), Ann. Mag. N. H. (5), vi., p. 221 (1880).
Shillong.

145. E. insolita (Walker), xxxv., p. 1648 (1866).

Dirades conchiferata, Moore, Lep. Ceylon, iii., p. 403, pl. 186, fig. 11 (1887).

Cherra Punji.

146. E. fulvilinea, Hampson, Ill. Typ. Lep. Het. B. M., viii., p. 103, pl. 150, fig. 19 (1891).

Shillong.

I have this also from the Nilgiri Hills, and from Fort Stedman, Shan States.

147. E. quadricaudata (Walker), xxiii., 847 (1861).

Erosia varisaria, Walker, xxiii., 848, and xxvi., 1757 (1862).

Cherra Punji.

148. E. moza (Butler), Ann. Mag. N. H. (5), i., p. 402 (1878).

Cherra Punji.

The type of this species came from Japan, the Cherra Punji are almost identical with it.

149. E. ocusta, sp. n.

J. Pale chocolate-brown, irrorated with black and brown atoms, both wings crossed by two pale lines, ante and post medial, arising from costa of forewings, from which they are first extended outwards, then abruptly curving inwards run direct to the hindermargin, are extended across the hindwings, both being deeply elbowed outwardly in their centres, the inner line edged outwardly and the outer line inwardly with black, the black edgings being broad in parts, the outer portion of both wings are suffused with black and brown, two indistinct black spots near hinder angle of forewings and an ochreous patch near outer margin above the middle on the hindwings; on the forewings there is a sub-marginal pale line outwardly edged with black, from the apex, stopping at

one-third before the hinder angle, at which part of the margin the wing is produced into a small angle; marginal line white, cilia dark brown edged with ochreous grey. Expanse of wings, $\frac{9}{10}$ inch.

Cherra Punji; three examples.

150. E. sreapa, sp. n.

 ${\mathfrak Z}$. Blackish brown, nearly uniform in colour, striations black, two black transverse lines across both wings, ante and post medial most distinct on costa of forewings from which they run outward, and then become sinuous, directly descending to the hinder margin, the outer one having white points; on the hindwings they are not sinuous, the inner one is almost invisible, the outer one is double, an ochreous line between them, it is bent acutely outwards in its centre where it has two small teeth, and some white points in its lower half, a black sub-marginal streak on forewings below the apex, marginal line ochreous, fringe blackish brown. Expanse of wings, 1_{10}^{-2} inch.

Cherra Punji; one example.

Genus Dirades, Walker.

D. bicaudata (Moore), P. Z. S., 1867, p. 643.
 Cherra Punji.

Genus ORUDIZA, Walker.

152. O. protheclaria, Walker, xxiii., p. 858 (1861).

Sub Group VI. GEOMETERS.

Fam. MENOCTENIIDÆ.

Genus Sarcinodes, Guén.

153. S. carnearia, Guén., Phal., i., p. 188 (1857). Very common.

154. S. restitutaria (Walker), xxvi., p. 1527 (1862).
Auxima sumatraria, Walker, xxxv., p. 1577 (1866).
Sarcinodes ægrota, Butler, Ill. Typ. Lep. Het. B. M., vi., p. 60, pl. 115, figs. 3, 4 (1886).

Very common.

- 155. S. æquilinearia (Walker), xxi., p. 292 (1860). Shillong; several examples.
- S. lilacina, Moore, Descr. Ind. Lep. Atk., iii.,
 p. 234 (1887).

Cherra Punji and Shillong; common.

- 157. S. debitaria (Walker), xxvi., p. 1527 (1862). Cherra Punji and Shillong; several examples.
- 158. S. susanu, Swinh., Trans. Ent. Soc., 1891, p. 488. Shillong and Cherra Punji; many examples.

Genus Noreia, Walker.

159. N. ajaia (Walker), Journ. Linn. Soc., iii., p. 195 (1859).
Shillong.

Genus Eumelia, Duncan.

- 160. E. rosalia (Cram.), Pap. Exot., iv., p. 152, pl. 368, fig. F. (1782).
 Common.
- 161. E. flavata, Moore, Lep. Ceylon, iii., p. 440, pl. 198, fig. 3 \(\chi \) (1887).

 Shillong; one example.
- 162. E. aureliata, Guén., Phal. î., p. 394, pl. 22, fig. 6 (1857).

 Shillong.

Fam. ORTHOSTYXIDÆ.

- Genus Ozola, Walker, xxiv., p. 1080 (1861).

 Carima, Walker, xxvi., p. 1630 (1862).

 Zarmigethusa, Walker, l.c., p. 1637.
- 163. O. microniaria, Walker, xxiv., p. 1080 (1862). Cherra Punji.
- 164. O. extersaria (Walker), xxiii., p. 926 (1861). Shillong and Cherra Punji.

165. O. biangulifera (Moore), Descr. Ind. Lep. Atk., iii., p. 263 (1887).

Shillong and Cherra Punji; common.

The inner band of forewings is acutely bent in on to the costa, but this species can more easily be distinguished from *extersaria* by having the discal band waved up to costa near apex, whereas in *extersaria* it is acutely angled inwards on to the corta at one-third from apex.

Genus Rambara, Moore.

166. R. efila, sp. n.

 \mathfrak{F} . White, both wings with a brown ringlet at the end of the cells, almost lunular in shape, a brown mark in centre of hinder margin of forewings, and a short brown streak before centre of abdominal margin of hindwings, giving with the cell marks the appearance of a broken medial band across both wings; an indistinct discal sinuous brown line on hindwings with slight traces of one on the forewings, a large black sub-apical spot on forewings, and black dots on the outer margin of both wings between the veins. Expanse of wings, $1\frac{1}{10}$ inch.

Cherra Punji; two examples of this fine Rambara.

Genus Naxa, Walker.

167. N. textilis, Walker, vii., p. 1743 (1856).

Shillong; two examples.

Orthosticis hiigeli, Felder, Reise Nov. Lep., pl. 130, fig. 19 3 (1874), is generally made a synonym to the above, but this wrong: there are two distinct species, although the pattern is very much the same; hiigeli has antennæ very much more deeply pectinated than in textilis.

Genus Celerena, Walker.

168. C. divisa, Walker, Trans. Ent. Soc. 1862, p. 72. Shillong and Cherra Punji.

Genus, Iotaphora, Nov.

Palpi short, covered with short stiff hairs, last joint depressed; antennæ of male bipectinate, with short stiff branches to the tips, the pectinations ciliated. Female with simple antennæ; hind-

wings with vein 2 one fourth from lower end of cell, 3 just before the end, 5 above the centre of disco-cellulars, rather close to the upper end of cell, 6 and 7 from end of cell; forewings with veins 2 and 3 as in hindwings, 5 from centre of disco-cellulars; hind tibic with two pairs of short spurs.

 I. iridicolor (Butler), Ann. Mag. N. H. (5), vi., p. 227 (1880).

Cherra Punji; one pair.

Genus Tosaura, Swinh.

T. falcipennis (Moore), Descr. Ind. Lep. Atk., iii.,
 p. 266, pl. 8, fig. 29 (1887).

Shillong and Cherra Punji; common.

T. picaria, Swinh., Trans. Ent. Soc., 1892, p. 16,
 pl. 1, fig. 16.

Shillong; many examples.

Fam. GEOMETRIDÆ.

Genus Euschema, Hüb.

Hazis, Boisd.

Heleona, Swainson.

172. E. militaris (Linn.), Mus. Lud. Ulr., p. 375 (1764). Shillong.

173. E. excubitor, Moore, P. Z. S., 1878, p. 846. Shillong.

Genus Pachyodes, Guén.

174. P. hæmataria (Herr Schüff.), Exot. Schm., figs. 205, 206 (1850-69).

P. ornataria, Moore, Descr. Ind. Lep. Atk., iii., p. 249 (1887).

Common.

175. P. vigens (Butler), Ann. Mag. N. H. (5), vi., p. 127 (1880).

176. P. apicalis (Moore), Descr. Ind. Lep. Atk., iii., p. 247 (1887). 177. P. costistrigaria (Moore), P. Z. S., 1867, p. 633. Shillong and Cherra Punji.

178. P. similis (Moore), Descr. Ind. Lep. Atk., iii., p. 248 (1887).

P. ruficosta, Hampson, Ill. Typ. Lep. Het. B. M., viii.,p. 108, pl. 150, fig. 16 (1891).Shillong.

 P. erionoma, Swinh., Ann. Mag. N. H. (6), xii., p. 219 (1893).

Shillong; numerous examples.

Genus Absala, Swinli.

180. A. dorcada, Swinh., Ann. Mag. N. H. (6), xii., p. 149. (Pl. II., fig. 6.)

Shillong; three males, one female.

Genus Pseudoterpna, Hübn.

Hypochroma, Guén.

Dindica, Moore.

Pingasa, Moore.

181. P. polyphænaria (Guén.), Phal., i., p. 280 (1857). Shillong and Cherra Punji; common.

182. P. para (Swinh.), Trans. Ent. Soc. 1891, p. 490. Shillong; many examples.

183. P. crenaria (Guén.), Phal., i., p. 278 (1857).

Hypochroma distenta, Walker, xxi., p. 434 (1860). H. sublimbata, Butler, Ann. Mag. N. H. (5), x., p. 232 (1882).

Shillong and Cherra Punji.

184. P. chlora (Cram.), Pap. Exot., iv., p. 233, pl. 398, fig. c (1782).

Hypochroma lariaria, Walker, xxi., p. 433 (1860). H. irrorataria, Moore, P. Z. S., 1867, p. 632. Shillong and Cherra Punji; very common.

185. *P. rufofasciata* (Moore), Descr. Ind. Lep. Atk., iii., p. 247 (1887).

Shillong and Cherra Punji.

186. P. ruginaria (Guén.), Phal., i., p. 278 (1857).

Hypochroma perfectaria, Walker, xxi., p. 434 (1860).

H. nyctemerata, Walker, l.c., p. 444.

Shillong and Cherra Punji; very common.

187. P. alba (Swinh.), Trans. Ent. Soc. 1891, p. 491, pl. 19, fig. 6.

Shillong; several males.

Genus Chlorodontopera, Warren.

188. *C. discospilota* (Moore), P. Z. S., 1867, p. 621. Shillong.

189. C. chalybeata (Moore), P. Z. S., 1872, p. 580, pl. 34, fig. 4.

Shillong and Cherra Punji.

Genus Epipristis, Meyrick. Terpuidia, Warren.

190. E. minimaria (Guén.), Phal., i., p. 279 (1857).

Hypochroma parvula, Walker, xxi., p. 435 (1860). Acidalia truncataria, Walker, xxiii., p. 774 (1861). Shillong and Cherra Punji.

Genus Herochroma, Swinh.

Actenochroma, Warren.

191. H. baba, Swinh., Ann. Mag. N. H. (6), xii., p. 148 (1893).

Shillong; many specimens.

Mr. Warren's paper on Indian Geometers in Coll. Elwes was published in the same month as mine in the Annals, but Part ii. of P. Z. S. was not issued from the printers until three weeks later than the issue of the August number of the Annals and Magazine of Nat. Hist. in which my paper appeared.

192. H. subtepens (Walker), xxi., p. 438 (1860).

Shillong; numerous examples.

The type in the O.M. came from Sarawak, it is, however, a common species in the Khasia Hills, and the Khasia Hill examples are identical with the type.

- 193. H. viridaria (Moore), P. Z. S., 1867, p. 632. Shillong and Cherra Punji; common.
- 194. H. muscicoloraria (Walker), xxvi., p. 1543 (1862). Shillong and Cherra Punji.

Genus Maxates, Moore.

- M. cœlataria (Walker), xxii., p. 552 (1861).
 Shillong.
- M. macariata (Walker), xxvi., p. 1562 (1862).
 Shillong.

Genus Lissolica, Nov.

Differs from *Maxates* in the simple antenne in both sexes; in the genus *Maxates* the antenne in the male is bipectinate for two-thirds its length, in the veination also vein 2 of the hindwings arises much nearer the end of the cell.

197. L. polygrapharia (Walker), xxi., p. 435 (1860). Macaria vagata, Walker, xxiii., p. 927 (1861). Shillong; common.

Genus Episothalma, Swinline.

- 198. E. sisunaga (Walker), xxii., p. 550 (1861).Thalassodes macruraria, Walker, xxvi., p. 1561 (1862).Shillong; nine specimens.
- 199. E. ocellata, Swinh., Ann. Mag. N. H. (6), xii., p. 218 (1893). (Pl. II., fig. 9.)
 Shillong and Cherra Punji; two examples.

Genus Cacamoda, Nov.

- 3. Antennæ simple, hindwing produced into a tail; veins 6 and 7 stalked at end of cell, 5 emitted very near 6, forewing with vein 3 emitted before end of cell, 6 and 7 stalked before end of cell.
- 200. C. viridata (Moore), P. Z. S., 1867, p. 623. Shillong.

Genus Agathia, Guén.

201. A. lycanaria (Kollar), Hüg. Kasch., iv., p. 486 (1848).

Common.

A. prasina, Swinh., Ann. Mag. N. H. (6), xii.,
 p. 219 (1893).

Shillong; three males.

203. A. lætata (Fabr.), Ent. Syst., iii., 2, 164 (1793). Shillong; four specimens.

204. A. quinaria, Moore, P. Z. S., 1867, p. 639. Cherra Punji and Shillong; many examples.

Put with hilarata, Guén., in the B.M. collection, but is certainly distinct; hilarata only differs from lætata in the medial transverse band of forewings: lætata, hilarata, and quinaria are closely allied, but the three forms appear constant without intermediates. I have many examples of each from different parts of India.

- 205. A. gemma, Swinh., Trans. Ent. Soc., 1892, p. 8. Shillong; five examples.
- 206. A. hemithearia, Guén., Phal. i., p. 381 (1857).
 Shillong.
- 207. A. beata, Butler, Ann. Mag. N. H. (5), vi., p. 218 (1880).
 Shillong.
- 208. A. arcuata, Moore, P. Z. S., 1867, p. 64. Shillong and Cherra Punji; very common.
- 209. A. codina, Swinh., Trans. Ent. Soc., 1892, p. 7, pl. 1, fig. 3.

Shillong; four males of this fine species.

Genus Tanaorhinus, Butler.

210. T. viridiluteata (Walker), xxii., p. 515 (1861).

Shillong and Cherra Punji; apparently a common species in the Khasias.

- 211. T. reciprocata (Walker), xxii., p. 515 (1861). Geometra dimissa, Walker, l.c., p. 516. Shillong; two examples.
- 212. T. kina, Swinh., Ann. Mag. N. H. (6), xii., p. 150 (1893). (Pl. II., fig. 15.) Shillong; four males.

Genus Aporandria, Nov.

Antennæ of male deeply pectinated for two-thirds its length, the pectinations ciliated; palpi upturned, thickly covered with hair, last joint short, tip square; hindwings with veins 3 and 4 and 6 and 7 forked one-third their distance beyond the cell, vein 2 emitted less than half the distance from the base to the fork of veins 3 and 4; forewing with vein 3 emitted a short distance before cell, vein 2 from the middle, vein 6 one-fifth beyond cell; hind tibiæ with two short terminal spurs.

213. A. specularia (Guén.), Phal., i., p. 342 (1857).
Shillong.

Genus Loxochila, Butler.

214. L. variegata, Butler, Ill. Typ. Lep. Het. B. M., vii., p. 104, pl. 136, fig. 3 (1889).

Shillong.

Genus Megalochlora, Meyrick.

- 215. M. vittata (Moore), P. Z. S., 1867, p. 636. Shillong.
- 216. M. avicularia (Guén.), Phal., i., p. 342 (1857).
 Shillong.

Genus Euchloris, Hübn. Thalassodes, Guén.

- 217. E. quadraria (Guén.), Phal., i., p. 360 (1857). Thalassodes inconclusaria, Walker, xxii., p. 556 (1861). Shillong.
- 218. E. lunifera (Moore), Descr. Ind. Lep. Atk., iii., p. 270 (1887).

Type Cherra Punji in Coll. Staudinger: I have not seen this species.

219. E. opalina (Butler), Ann. Mag. N. H. (5), vi., p. 214 (1880).

Shillong and Cherra Punji.

Very closely allied to the preceding, but uniformly larger.

220. E. liliana (Swinh.), Trans. Ent. Soc., 1892, p. 7, pl. 1, fig. 2.

Shillong.

- 221. E. acte, Swinh., l.c., p. 6, pl. 1, fig. 13. Shillong.
- 222. E. thalassica (Moore), Lep. Ceylon, iii., p. 430, pl. 194, fig. 6 (1887).

 Cherra Punji.
- 223. E. devexata (\$\partial \text{(Walker), xxii., p. 573 (1861).}

 Agathia scintiligera (\$\delta\$), Butler, Ann. Mag. N. H. (5),

 vi., p. 216 (1880).

 Shillong.

Genus Thalerura, Nov.

Cell of hindwings larger than in *Euchloris*, vein 7 emitted nearer its upper end, antennæ bipectinate for three-fourths from base, the pectinations evenly ciliated.

224. T. goniaria (Felder), Reise Nov. Lep., pl. 128, fig. 3 9 (1874).

Cherra Punji.

225. T. urapteraria (Walker), xxxv., p. 1608 (1866). Shillong; two examples.

Genus Gelasma, Warren.

226. G. thetydaria (Guén.), Phal., i., p. 358 (1857).

Thalassodes bifasciata, Walker, xxvi., p. 1562 (1862).

Shillong.

227. G. griseoviridis, Warren, P. Z. S., 1893, p. 353, pl. 31, fig. 6.
Cherra Punji.

Genus Enospila, Swinhoe.

228. *Œ. lyra*, Swinh., Trans. Ent. Soc., 1892, p. 5. Shillong and Cherra Punji; many specimens.

229. Œ. strix (Butler), Ill. Typ. Lep. Het. B. M., vii.,
p. 105, pl. 136, fig. 8 (1889).
Cherra Punji.

Genus Nemoria, Hübn. Hemithea, Dup.

230. N. insularia (Guén.), Phal., i., p. 315 (1857).

Thalera insularia, Hampson, Ill. Typ. Lep. Het. B. M., viii., 28, 777 (1891).

Shillong and Cherra Punji.

The Cherra Punji examples are much larger than those from Shillong, but there is no specific difference between them.

Genus THALERA, Hübn.

231. T. disjuncta, Walker, xxii., p. 595 (1861). Shillong.

232. T. graminea, Hampson, Ill. Typ. Lep. Het. B. M., viii., p. 109, pl. 151, fig. 1 (1891).

Cherra Punji.

Genus Eucrostes, Hübn.
Comibæna, Hübn.
Uliocnemis, Warren.

233. E. sanguilineata (Moore), P. Z. S., 1867, p. 638. Cherra Punji.

234. E. partita (3) (Walker), xxii., p. 573 (1861).

Comibæna felicitata, (9), Walker, l.c., p. 579.

Thalera concisiplaga (3), Walker, l.c., p. 598.

Cherra Punji.

235. E. integranota (Hampson), Ill. Typ. Lep. Het. B. M., ix., p. 146, pl. 170, fig. 13.

Cherra Punji.

236. E. kafebera, sp. n.

& White, forewings with a green transverse sub-basal band, a broader discal band, and between these a large green spot separated from the bands by a fine white line; this discal band is continued on the hindwings as a medial band, bent outwards in the middle; both wings with a submarginal macular green band, the spots formed by the white veins and a white outer festoon; these bands have between them white bands, through the centre of which runs a fine sinuous green line, outer margin and cilia green, the veins white and white streaks in the cilia opposite the veins; thorax green, abdomen with green segmental band; underside white. Expanse of wings, $1\frac{2}{10}$ inch.

Cherra Punji; two examples.

I feel uncertain as to the genus of this insect, and as Mr. Hampson is now working out the genera of the Geometridæ, I prefer leaving it to him to determine.

Genus Berta, Walker.

.237. B. chrysolineata, Walker, xxvi., p. 1621 (1862). Shillong.

Genus Timandra, Dup.

238. *T. aventiara* (Guen.), Phal. ii., p. 3 (1857). Shillong.

239. T. convectaria (Walker), xxiii., p. 800 (1861).
Timandra comptaria, Walker, xxvi., p. 1615 (1862).
Shillong and Cherra Punji.

T. responsaria (Moore), Descr. Ind. Lep. Atk., iii.,
 p. 255 (1887).

Shillong and Cherra Punji.

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Fam. ACIDALIDÆ.

Genus Perixera, Meyrick.

- 241. *P. obrinaria* (Guén.), Phal., i., p. 414 (1857). Shillong.
- 242. P. absconditaria (Walker), xxvi., p. 1580 (1861). Common.

Genus MESOTROPHE, Hampson.

243. M. expunctaria (Walker), Journ. Linn. Soc., iii., p. 195 (1859).

A. ovisignata, Moore, Lep. Ceylon, iii., p. 444 (1887). Shillong.

Genus Trirachopoda, Hampson.

244. T. obstataria (Walker), xxiii., p. 769 (1861).

Anisodės subroseata, Walker, xxvi., p. 1582 (1862).

A. acuta, Moore, Lep. Ceylon, iii., p. 445, pl. 215, fig. 9 (1887).

Shillong.

Genus Anisodes, Guén.

- 245. A. lichenaria, Swinh., Trans. Ent. Soc., 1892, p. 8. Shillong.
- 246. A. intermixturia, Swinh., l.c. Shillong.
- 247. A. pulverentula, Swinh., l.c., p. 9, pl. 1, fig. 8. Shillong.
- 248. A. heydena, sp. n.
- 3. Yellowish straw colour, upperside of palpi black; wings irrorated with brown atoms, forewings with a very large chocolate-brown oval patch in the centre, a suffused, sinuous short band running upwards from it, hindwings with a similar central smaller spot, pale in its centre, a sub-basal transverse brown line, an antemedial thin brown band touching the inner side of the spot, and a

discal brown line running evenly with the outer margin across both wings; on forewings there are two small suffused brown patches on the margin, one at the apex and the other below it; marginal points black, one on each vein and one between each vein. Expanse of wings, $1\frac{4}{10}$ inch.

Cherra Punji; one example.

249. A. dotilla, sp. n.

 δ Dark pinkish-grey, wings densely irrorated with minute brown atoms, a white dot at the end of each cell, those on the hindwings ringed with black, both wings with a discal row of black dots on the veins and a similar row of marginal dots, cilia pale grey. Underside body and wings suffused with pink, a discal sinuous pale brown indistinct line with pale black points across both wings, marginal line brown, legs pink, abdomen grey. Expanse of wings, 1_{30}^{-1} inch.

Cherra Punji; one example.

Genus Dithalma, Meyrick.

- 250. D. idea (Swinhoe), Trans. Ent. Soc. 1892, p. 6. Shillong and Cherra Punji.
- 251. D. crina (Swinhoe), l.c., p. 14, pl. 1, fig. 14. Shillong.
- 252. D. albivertee (Swinhoe), l.c., p. 15. Shillong and Cherra Punji.
- 253. D. hampsoni (Swinhoe), l.c., p. 14. Shillong.
- 254. *D. mecysma*, sp. n.
- ^γ Q. Dark mouse colour, wings very minutely irrorated with grey, an indistinct black dot at the end of each cell, both wings crossed by ante-medial and post-medial nearly straight brown lines, the latter a little outwardly bent below the middle on the hindwings, forewings with a discal similar line, and both wings with brown marginal lines, cilia grey, underside grey, lines as above. Expanse of wings, ⁹/₁₀ inch.

Cherra Punji; numerous specimens.

Genus Erithrolophus, Swinh. Organopoda, Hampson.

255. E. fascicorpus, Swinh., Trans. Ent. Soc. 1892, p. 11. Shillong.

256. E. carnearia (Walker), xxii., p. 644 (1861).

Shillong. The cell spot in both wings is very variable in size, and sometimes in the forewings it is obsolete.

Genus Synegiodes, Swinh.

257. S. diffusifascia, Swinh., Trans. Ent. Soc. 1891,
p. 11, pl. 1, fig. 9, and Ann. Mag. N. H. (6), xii.,
p. 150 (1893).

Common.

258. S. histrionaria, Swinh., Trans. Ent. Soc. 1891, p. 12. Common.

Genus Streptopteron, Swinh.

259. S. posticamplum, Swinh., l.c., p. 10, pl. 1, fig. 12. Shillong. The type specimen is the only example received of this extraordinary insect.

Genus Chrysocraspeda, Warren.

260. C. abhadraca (Walker), xxii., p. 630 (1861). Cherra Punji.

Genus Acidalia, Treit.

261. A. walkeri, Butler, P. Z. S., 1883, p. 170.

A. extimaria, Walker, xxiii., p. 794, No. 280, nec. 782, No. 252 (1861).

Shillong and Cherra Punji.

262. A. opsinaria, Swinh., Trans. Ent. Soc. 1892, p. 15. Shillong.

263. A. similaria (Moore), P. Z. S., 1867, p. 841. Shillong.

- 264. A. attentata, Walker, xxii., p. 754 (1861). Shillong.
- 265. *A. patularia*, Walker, xxxv., p. 1633 (1866). Shillong.
- 266. A. remotata, Guén., Phal., i., p. 458 (1857). Shillong.
- 267. A. nesciaria, Walker, xxii., p. 750 (1861).A. negataria, Walker, xxii., p. 751.Cherra Punji.
- 268. A. fibulata, Guen., Phal., i., p. 490, pl. 15, fig. 5 (1857). Cherra Punji.

Genus Craspedia, Hübn.

- 269. C. pallivittata (Moore), P. Z. S., 1867, p. 641. Shillong and Cherra Punji.
- 270. C. arenosaria (Moore), Lep. Ceylon, iii., p. 445 (1887).
 Shillong.
- C. addictaria (Walker), xxii., p. 749 (1861).
 Cherra Punji.

Genus Rhodostrophia, Hübner.

Phyletis, Guén.

Delocharis, Butler.

- 272. R. stigmatica, Butler, Ill. Typ. Lep. Het. B. M., vii., p. 110, pl. 136, figs. 19, 20 (1889).Shillong.
- 273. R. prasonaria (Swinh.), Trans. Ent. Soc., 1892, p. 12.

Tanaotrichia trilineata, Warren, P. Z. S., 1893, p. 361, pl. 32, fig. 2.

Shillong.

274. R. pelloniaria (Guén.), Phal., ii., p. 169 (1857). Shillong and Cherra Punji; common.

275 R. khasiana (Moore), Desc. Ind. Lep. Atk., iii., p. 264 (1887).

Cherra Punji; a very distinct species.

276. R. similata, Moore, Desc. Ind. Lep. Atk., iii., p. 264 (1887).

The type came from the Khasia Hills, not in my collection.

This genus links the Acidulidæ with the Geometridæ, vein 5 in both wings being emitted above the centre of discocellulars.

Genus Hyria, Steph.

277. H. ferruginaria (Moore), P. Z. S., 1867, p. 654.

278. H. marginata, sp. n.

3. Rosy grey, minutely irrorated with rosy red atoms, forewings with a black mark at the end of the cell, both wings crossed by indistinct sinuous red lines, ante-medial, medial, and post-medial, the first obsolete on hindwing, the last with brown points on the veins, costa of forewings and marginal line on both wings dark reddish brown, thick, and very prominent, cilia rosy. Expanse of wings, $\frac{1}{10}$ inch.

Cherra Punji.

Genus Defoa, Swinh. Lipomelia, Warren.

279. D. ustata, Swinh., Ann. Mag. N. H. (6), xii., p. 151 (1893).

Lipomelia subusta, Warren, P. Z. S., 1893, p. 360, pl. 32, fig. 24.

Shillong and Cherra Punji.

Genus Somatina, Guén.

280. S. rosacea, sp. n.

¿. Front white, collar and abdomen rosy, thorax white, abdomen with darker segmental bands; forewings greyish white with the interior portions suffused with rosy, a black point at end of

cell, a patch of darker rosy grey in the disc, limited outwardly by a pale whitish sinuated line which commences on the hinder margin near the angle, and curves inwards round the top of the cell. On the inner side of this line there is a brownish suffusion, a submarginal grey band arising from a small black patch near the hinder angle, and curving inwards in to the centre where it is double, leaving the apex white, marginal line black, slightly lunular; hindwings rosy, a more distinct black point at the end of cell, a submarginal pale sinuous line, inwardly broadly edged with brownish; a marginal white band with the ground colour running into it in parts, and a black marginal line as in forewings, cilia of both wings white, interlined with rosy grey. Expanse of wings, $1\frac{\pi}{10}$ inch.

Cherra Punji; two examples.

Genus Runeca, Moore.

281. R. ferrilineata, Moore, Desc. Ind. Lep. Atk., iii., p. 252, pl. 8, fig. 13 (1887).

Cherra Punji.

Genus Problessis, Led. Argyris, Guén.

282. P. apollinaria (Guén.), Phal., ii., p. 13 (1857). Shillong and Cherra Punji.

With the discal ocelli of forewings very large and quite round.

283. *P. deliaria*, Walker, xxiii., p. 808 (1861). Shillong.

Very doubtfully distinct from apollinaria.

284. P. delphiaria, Guén., Phal., ii., p. 14 (1857).
P. vulgaris, Butler, Ill. Typ. Lep. Het. B. M., vii., p. 43, pl. 125, fig. 2 (1889).
Shillong.

285. P. extrusaria, Walker, xxii., p. 637 (1861). Cherra Punji.

Genus Alex, Walker.

Orgalnia, Walker.

Gamoruna, Moore.

286. A. palparia (Walker), xxiii., p. 988 (1861).

A. nigrozonata, Walker, xxvi., p. 1754 (1862).
Gamoruna palparia, Moore, Descr. Ind. Lep. Atk., iii., p. 265 (1887).

Shillong and Cherra Punji; common.

Genus Geoglada, Nov.

Closely resembles Alex in appearance, but in the male the antennæ is serrate; in Alex it is bi-pectinate. The cell is longer, vein 5 of hindwings is free; in Alex it is stalked with 6.

287. G. helicola, n. sp.

\$\delta\$. Olive-brown, without the red colour always to be found in \$A. palparia\$, the transverse band and other markings very similar. Sometimes there is a large blackish-brown spot on forewings near the hinder angle, but this is often absent; the underside, however, is very distinctive; the bands are more like lines, and well defined; the medial band is farther away from the base in the hindwings than in \$Alex\$, and is well curved; the sub-marginal band in a semi-dentated line, not a diffuse band; and on the forewings there is an inwardly curved thin band inside the middle band, and rising from its lower end, runs up towards the costa. Expanse of wings, 2 inches.

Shillong and Cherra Punji. Many examples, but not nearly so common as *Alex*, the type female of which in the B. M. has been carefully examined.

Genus Trygodes, Guén.

288. T. divisaria, Walker, xxiii., p. 927 (1861). Shillong and Cherra Punji.

Fam. LARENTIIDÆ.

Genus GONANTICLEA, Swinh.

289. G. aversa, Swinh., Trans. Ent. Soc., 1892, p. 4. Shillong; common.

290. G. occlusata (Felder), Reise Nov. Lep., pl. 132, fig. 16 (1874).

Shillong and Cherra Punji.

Genus Collix, Guén.

291. *C. hypospitata*, Guén., Phal., ii., p. 358 (1857). Shillong.

292. C. ghosha, Walker, xxiv., p. 249 (1862). Shillong.

Genus Remodes, Guén.

293. R. abnormis, Moore, Descr. Ind. Lep. Atk., iii., p. 271, pl. 8611 (1887). Cherra Punji.

294. R. decussata (Moore), P. Z. S., 1867, p. 655, pl. 33, fig. 10.

295. R. fasciata, Moore, l.c., p. 270. The type came from Cherra Punji.

296. R. interruptaria, Moore, l.c. Recorded from the Khasia Hills.

297. R. lineosa, Moore, Descr. Ind. Lep. Atk., iii.,
 p. 270, pl. 8610 (1887).
 Shillong.

Genus CARIGE, Walker.

298. C. rachiaria, Swinh., Trans. Ent. Soc. 1891, p. 492. Shillong and Cherra Punji.

299. C. lunulineata, Moore, Descr. Ind. Lep. Atk., iii., p. 263, pl. 8, fig. 26 (1887).

Cherra Punji.

300. C. zalska, sp. n.

3. Ochreous grey, striated with brown; forewings with the costa marked with black and pale spots, crossed by an inner indistinct and incomplete brownish band, a discal, sinuous brownish line, double in parts, and with two or three square black spots in patches on its outer side above the hinder angle, where there are also some black and white striations marking the wing, and

extending in a band-like form up the outer margin; hindwings with the outer portion darkly and thickly striated with brown, underside paler, with black striations and band on the outer portions of both wings. Expanse of wings, $\frac{8}{1.0}$ inch.

Cherra Punji.

A very obscure-looking little insect, allied to nothing I know of; received in great numbers.

Genus Phibalapteryx, Steph.

301. *P. plurilineata*, Moore, Descr. Ind. Lep. Atk., iii., p. 273 (1887).

P. nigrovittata, Warren, P. Z. S., 1888, p. 327.

P. nigripunctata, Warren, l.c., p. 328.

Shillong. Identical with my Thundiani examples.

Genus ZIRIDAVA, Walker.

302. Z. xylinearia, Walker, xxvi., p. 1550 (1862).
 Menophra (?) rubridisca, Hampson, Ill. Typ. Lep. Het.
 B. M., viii., p. 106, pl. 150, fig. 8 (189).

Shillong; common.

Genus Ardonis, Moore.

303. A. chlorophilata (Walker), xxvi., p. 1768 (1862). Shillong.

Genus Eupithecia, Curt.

304. E. felicata, Swinh., Trans. Ent. Soc. 1892, p. 1. Shillong and Cherra Punji; many examples.

305. *E. infestata*, Swinh., P. Z. S., 1889, p. 430. Cherra Punji.

306. E. dentifascia, Hampson, Ill. Typ. Lep. Het. B. M., viii., p. 172, pl. 152, fig. 12 (1891).
Shillong.

307. E. rigida, Swinh., Trans. Ent. Soc. 1892, p. 2. Shillong.

308. *E. infestata*, Swinh., P. Z. S., 1889, p. 430. Cherra Punji.

309. E. atroviridis, Warren, P. Z. S., 1893, p. 384, pl. 31, fig. 19.

Shillong.

310. E. griseipennis, Moore, Descr. Ind. Lep. Atk., iii., p. 269, pl. 1, fig. 28 (1887). Cherra Punji.

311. E. incurvata, Moore, l.c., p. 268. The type came from the Khasias.

312. E. rufifascia, Hampson, Ill. Typ. Lep. Het. B. M., ix., p. 152, pl. 171, fig. 15 (1893). Cherra Punji.

Genus Lygranoa, Butler.

313. L. rectilineata, Moore, Descr. Ind. Lep. Atk., iii., p. 272 (1887).

The type came from the Khasia Hills.

Genus BARDANES, Moore.

314. B. plicata, Moore, Descr. Ind. Lep. Atk., iii., p. 251, pl. 8, fig. 22 (1887). Shillong.

Genus Lobophora, Steph.

315. L. decorata, Moore, l.c., p. 272. Shillong and Cherra Punji.

316. L. pulcherrima, Swinh., Anu. Mag. N. H. (6), xii., p. 224 (1893).
Shillong.

Genus Dysethia, Warren.

317. D. ocyptaria (Swinh.), Ann. Mag. N. H. (6), xii., p. 157 (1893).
Shillong.

Genus Cambogia, Guén.

318. *C. pulchella* (Hampson), Ill. Typ. Lep. Het. B. M., viii., p. 124, pl. 153, fig. 22 (1891). Cherra Punji.

Genus Laciniodes, Nov.

Antennæ simple in both sexes; palpi depressed, short, covered with hairs; hindwing with the lower portion of cell much extended, vein 3 emitted from the end, 2 at one third before end, 5 a little above middle of disco-cellular, 6 and 7 forked at nearly half the distance beyond upper end of cell; forewing with vein 3 emitted a little before end of cell, 2 at one third before end, 5 a little above centre of disco-cellular, 6 and 7 at upper end of cell; mid-tibia with one pair of terminal spurs; hind-tibia with two pairs.

319. L. plurilinearia (Moore), P. Z. S., 1867, p. 645. Shillong and Cherra Punji.

There are two forms of this insect, one being without any of the usual dark markings on the wings.

Genus Plemyria, Hüb.

320. P. catenaria (Moore), P. Z. S., 1867, p. 655, pl. 33, fig. 9.
Shillong.

Genus Polynesia, Swinh.

321. P. truncapex, Swinh., Trans. Ent. Soc. 1892, p. 5. Shillong.

Genus CRYPTOLOBA, Warren.

322. *C. aerata* (Moore), P. Z. S., 1867, p. 654. Shillong.

Genus Xanthorhoë, Hüb. Coremia, Guén.

323. *X. conturbata* (Walker), xxvi., p. 1703 (1862). Shillong.

Genus Epirrhoë, Hüb.

324. E. exliturata (Walker), xxiv., p. 1195 (1862). Shillong.

Genus Cidaria, Treit.

- 325. C. relata, Butler, Ann. Mag. N. H. (5), vi., p. 229 (1880),
- 326. *C. aliena*, Butler, *l.c.*, p. 230. Shillong.
- 327. C. fecunda, Swinh., Trans. Ent. Soc. 1891, p. 493. Shillong and Cherra Punji,
- 328. C. scortea, Swinh., l.c. Shillong.
- 329. C. delecta, Butler, Ann. Mag. N. H. (5), vi., p. 229 (1880).
 Shillong; common.
- 330. C. curcumata, Moore, Descr. Ind. Lep. Atk., iii, p. 278 (1887). Shillong and Cherra Punji.
- 331. C. decurrens, Moore, Descr. Ind. Lep. Atk., iii., p. 276 (1887).
 Cherra Punji.
- 332. C. bareconia, sp. n.
- \$\forall \text{?}\$ Palpi, antenne, head and body black; forewings with the basal half dark blackish-brown, with its outer edge somewhat sinuous and bent slightly outwards above the middle, crossed in its centre by a pale thin band which has a thin black line in it, is sometimes indistinct and sometimes obsolete, a transverse brown line close to the outer edge of the basal half followed by a pale pinkish-grey band, and then a number of transverse lines close together right up to the outer margin, where there is a black patch near the hinder angle, another below the apex, and a third in the costa near the apex; sometimes the outer lines are obsolete, and the outer portions of the wings grey with the black patches showing more prominently; hindwings dark brownish-grey, with indistinct transverse grey bands, which however, are often obsolete; underside dark grey, crossed by indistinct central and discal darker bands. Expanse of wings, \(\frac{8}{15} \frac{9}{10}\) inch.

Cherra Punji; many examples.

- 333. C. substituta, Walker, xxxv., p. 1691 (1866). Shillong.
- 334. *C. chalybearia*, Moore, P. Z. S., 1867, p. 663. Shillong.
- 335. C. cervinaria, Moore, l.c., p. 664. Shillong.
- 336. *C. nivicincta*, Butler, Ill. Typ. Lep. Het. B. M., vii., p. 119, pl. 137, fig. 20 (1889). Shillong.
- 337. C. viridata, Moore, P. Z. S., 1867, p. 661. Shillong.
- 338. C. aurata, Moore, l.c., p. 664. Shillong.

Genus Paralophia, Warren.

339. P. pustulata, Warren, P. Z. S., 1893, p. 371, pl. 30, fig. 7.
Cherra Punji.

Genus Eustroma, Hübn.

- 340. E. dissecta, Moore, Lep. Ceylon, iii., p. 488, pl. 207, fig. 9 \(\varphi\) (1887).

 Shillong and Cherra Punji.
- 341. E. triangulifera, Moore, Descr. Ind. Lep. Atk., iii., p. 275 (1887).

 Shillong; common.
- 342. E. obscurata, Moore, P. Z. S., 1867, p. 633, pl. 33, fig. 7.
 Shillong; very common.
- 343. E. furva (Swinh.), Trans. Ent. Soc. 1891, p. 494. Shillong and Cherra Punji.
- 344. E. dentifera, Moore, Descr. Ind. Lep. Atk., iii., p. 275 (1887).

 The type came from Cherra Punji.

- 345. E. monana, Swinh., Aun. Mag. N. H. (6), xii., p. 224 (1893). (Pl. II, fig. 10.) Shillong.
- 346. E. multifaria (Swinh.), P. Z. S., 1889, p. 429, pl. 44, fig. 9.

 Cherra Punji.
- 347. E. aurigena (Butler), Ann. Mag. N. H. (5), vi., p. 230 (1880).

Genus Scotosia, Steph.

348. S. sordidata, Moore, Descr. Ind. Lep. Atk., iii., p. 274 (1887).
Shillong and Cherra Punji.

Genus Gandaritis, Moore.

349. *G. flavata*, Moore, P. Z. S., 1867, p. 660. Cherra Punji.

Genus Photoscotosia, Warren.

350. *P. miniosata*, Walker, xxv., p. 1354 (1862). Shillong.

Genus Anthyria, Swinh.

- 351. A. grataria (Walker), xxii., p. 663 (1861). Shillong.
- 352. A. iole, Swinh., Trans. Ent. Soc. 1892, p. 2. Shillong.
- 353. A. lunulosa (Moore), Lep. Ceylon, iii., p. 450, pl. 200, figs. 5, 5a (1887).

 Shillong and Cherra Punji.

Genus Pomasia, Guén.

354. P. moniliata, Warren, P. Z. S., 1893, p. 367, pl. 32, fig. 9.

Type, Khasia Hills, in coll. Elwes.

Genus Asthena, Hübn.

355. A. ochracea, Warren, P. Z. S., 1888, p. 231.

A. ochracea, Elwes, P. Z. S., 1893, p. 264, pl. 32, fig. 10 ç.

Recorded from Shillong.

Genus Psilocambogia, Hampson.

356. P. rapistriaria (Swinh.), Trans. Ent. Soc. 1890, p. 210, pl. 7, fig. 9. Shillong.

357. *P. deviaria* (Walker), xxii., p. 664 (1861). Shillong.

Genus Rhodometra, Meyrick.

358. R. sacraria (Linn.), Nat. i., 2, 863, 220 (1766). Cherra Punji.

Fam. BOARMIIDÆ.

Section I. URAPTERYGINÆ.

Genus Urapteryx, Leach.

- 359. *U. multistrigaria*, Walker, xxxv., p. 1535 (1866). Shillong and Cherra Punji.
- 360. U. sciticaudaria, Walker, xxvi., p. 1480 (1862). Shillong.
- 361. *U. picticaudata*, Walker, xx., p. 12 (1860). Shillong and Cherra Punji.

This species, the type of which is in O.M. from Borneo, is quite distinct from the yellow form; *sciticaudaria* is uniformly much larger, and with different markings.

362. *U. primularis*, Butler, Ill. Typ. Lep. Het. B. M., vi., p. 49, pl. 113, fig. 4 (1886).

Shillong.

Genus Thinopteryx, Butler.

363. T. crocopterata (Kollar), Kasch von Hügel, iv., p. 483 (1848).

Shillong and Cherra Punji; very common.

364. T. prætoraria (Felder), Reise Nov. Lep., pl. 122, fig. 13, & (1893).

Shillong.

365. T. nebulosa, Butler, Journ. Linn. Soc., 1883, p. 203.

Shillong and Cherra Punji. Quite distinct from the preceding. I have a fine series of both of them without any intermediates.

Genus Xeropteryx, Butler.

366. *X. columbicola* (Walker), xx., p. 11 (1860). Shillong.

Genus Sirinopteryx, Butler.

367. S. rufivinctata (Walker), xxvi., p. 1747 (1862). Shillong and Cherra Punji; very common.

Section II. DEILINIINÆ.

Genus Bapta, Steph.

368. B. margarita (Moore), P. Z. S., 1867, p. 647.
Corycia alba, Moore, Descr. Ind. Lep. Atk., iii., p. 261 (1887).

Shillong.

369. B. platyleucata (Walker), xxxv., p. 1628 (1866). Cherra Punji.

370. B. indistincta (Moore), Descr. Ind. Lep. Atk., iii., p. 261 (1887).

Shillong and Cherra Punji.

371. B. inamata (Walker), xxii., p. 755 (1861). Shillong and Cherra Punji.

Genus Deilinia, Hübn.

372. D. luteifrons, sp. n. (Pl. II., fig. 14.)

Q. Pure white; front luteous; wings crossed by three indistinct dentated grey lines; ante-medial, medial, and discal at even TRANS. ENT. SOC. LOND. 1894.—PART I. (MARCH.)

distances apart; fore legs with ochreous tibiæ; hind legs with brown bands on the tarsi. Expanse of wings, $1\frac{1}{2}$ inch.

Cherra Punji. Two examples.

Genus Petella, Herr Schäff.

373. P. medardaria, Herr Schüff, Exot. Schm., pl. 94, fig. 534 (1856).

Shillong and Cherra Punji.

- 374. *P. fasciata* (Moore), P. Z. S., 1867, p. 634, pl. 32, fig. 8. Shillong.
- 375. P. riobearia (Walker), xx., p. 129 (1860). Shillong and Cherra Punji; common.
- 376. *P. capitata* (Walker), xxiii., p. 1019 (1861). *Alana rubiginata*, Walker, xxxv., p. 1568 (1866).

 Cherra Punji.
- 377. P. albopunctata (Swinh.), Trans. Ent. Soc., 1891, p. 491. Shillong.
- 378. P. cervinaria (Moore), Descr. Ind. Lep. Atk., iii., p. 233 (1887).
 Cherra Punji.

Genus Tasta, Walker.

Dissophthalmus, Butler.

379. T. micaceata, Walker, xxvi., p. 1570 (1862).

Dissophthalmus iridis, Butler, Ann. Mag. N. H. (5),
vi., p. 219 (1880).

Cherra Punji.

Genus Myrteta, Walker.

Orthocabera, Butler.

Microniodes, Hampson.

- 380. M. planaria, Walker, xxiii., p. 831 (1861). Shillong.
- 381. M. ocernaria (Swinh.), Ann. Mag. N. H. (6), xii., p. 152 (1893). (Pl. II., fig. 8.) Shillong.

382. M. brunneiceps (Warren), P. Z. S., 1893, p. 387, pl. 31, fig. 23.

Shillong and Cherra Punji.

Genus Caberodes, Guén.

383. C. achromaria, Guén., Phal. i., p. 136 (1857). Shillong and Cherra Punji.

384. *C. costalis* (Moore), P. Z. S., 1867, p. 616. Shillong.

Genus Heterostegane, Hampson.

385. H. subtessellata (Walker), xxvi., p. 1648 (1862). Shillong, Cherra Punji.

386. H. lala (Swinh.), Trans. Ent. Soc., 1892, p. 13. Shillong.

Genus Stegania, Guén.

387. S. latifasciata (Moore), Descr. Ind. Lep. Atk., iii., p. 200 (1887). Cherra Punji.

388. S. peralba, sp. n. (Pl. II., fig. 5.)

 \circlearrowleft Q. Of a uniform white colour, tinged with grey. Above there are very few markings. Costal line of forewings flesh colour, marked with black; and on the hind wings the cell spot and black band of the underside is slightly visible; on the underside there is a minute black dot at the end of cell on forewings; and on the hindwings the black spot and black discal band are very prominent; legs flesh-colour. Expanse of wings, \circlearrowleft \P_{\circ} , $\ \$ \P_{\circ} inch.

Cherra Punji; two males, one female.

Genus Micronissa, Swinh.

389. M. dephinaria, Swinh., Ann. Mag. N. H. (6), xii., p. 152 (1893).

Shillong.

Genus Plutodes, Guén.

390. P. flavescens, Butler, Ann. Mag. N. H. (5), vi., p. 223 (1880).

Shillong; common.

391. P. exquisata, Butler, Ann. Mag. N. H. (5), vi., p. 223 (1880).

Shillong; a fine series.

392. P. subcaudata, Butler, l.c., p. 224. Shillong; many examples.

393. P. prasina, Swinh., Trans. Ent. Soc., 1892, p. 13, pl. 1, fig. 10.

Shillong and Cherra Punji.

394. P. costatus, Butler, Ill. Typ. Lep. Het. B. M., vi., p. 53, pl. 114, fig. 4 (1886).

P. triangularis, Warren, P. Z. S., 1893, p. 388.

Shillong and Cherra Punji; very common.

This is a variable species, and Mr. Warren could not have had a sufficient number before him when describing triangularis; none of the points of difference mentioned by him hold good. I have examples from Solon, near Simla, and a long series from Shillong and Cherra Punji. The costal band of forewings varies in width, the triangular central tooth varies in size; in one example it is continued in the form of a yellow bar right across the wing to the hinder angle, and similarly the antemedial transverse line in some examples runs into the yellow band just before the first tooth, but in others it runs into the tooth.

395. P. lamisca, sp. n.

 \mathcal{J} . Bright ochreous yellow, thorax (except the collar) and abdomen chocolate-brown; wings patched and marked with the same colour; forewings with a patch at base extending also down the abdominal margin of hindwings, as in all the species of the *Cyclaria* group; a large discal patch on forewings with dentated margin all round, and joined to the basal patch by an irregular band; on hindwings two bands of small spots, discal and submarginal, with a diffuse patch between them below the middle, Expanse of wings, $1\frac{\pi}{10}$ inch.

Cherra Punji; three examples.

Section III. ENNOMINÆ.

Genus Dalima, Moore.

Panisala, Moore.

Metoxidia, Butler.

Hololoma, Warren.

396. D. intricata, Warren, P. Z. S., 1893, p. 396. Shillong.

397. D. patnaria, Felder, Reise Nov. Lep., pl. 122, fig 12, & (1873).

Shillong; common.

398. *D. truncataria* (Moore), P. Z. S., 1867, p. 620. Cherra Punji.

399. D. patularia (Walker), xx., p. 247 (1860).

Shillong and Cherra Punji. A very variable species, I have them in all colours, from dark purplish brown to pale yellowish grey.

400. D. calaminia (Butler), Ann. Mag. N. H. (5), vi., p. 121 (1880).

Shillong; many examples.

Genus Hypochrosis, Guén.

Omiza, Walker.

Marcala, Walker.

Celenna, Walker.

Phænix, Butler.

401. H. pachiaria (Walker), xx., p. 247 (1860). Shillong and Cherra Punji.

402. H. hyadaria (Guén.), Phal. ii., p. 537 (1857).
 Marcala ignivorata, Walker, xxvi., p. 1764 (1862).
 Shillong and Cherra Punji.

403. H. venusa, sp. n.

3. Of a uniform dark pink brown, with a greenish tinge, antennæ black, forewings with the costal line ochrous, dotted with brown, a dark pink upright line or thin band from the hinder margin before the middle, which bifurcates at the end of the cell, the outer branch outwardly elbowed before reaching the costa hindwing with the costal space pale pinkish, underside pale

ochreous red, unmarked, darkest on forewings with the hinder marginal space of that wing whitish. Expanse of wings, $1\frac{3}{10}$ inch.

Cherra Punji; one example.

The general colouration above is somewhat similar to that of *H. hyadaria*, Guén.=ignivorata, Walk., but the markings are different to any other species of this genus yet recorded. I have very fine series of all the different species of *Hypochrosis* mentioned in this paper; all the females are more or less like each other, but can easily be separated; the males are very distinct, and I have never seen any intermediates.

404. H. abstractaria (Walker), xxxv., p. 1559 (1866).
Marcala irrorata, Moore, Deser. Ind. Lep. Atk., iii., p. 232 (1887).

Shillong and Cherra Punji; common. A somewhat variable insect; many of the examples have black patches on the hinder margin near the angle of various sizes, some of them very large.

405. H. obliquaria (Moore), l.c.

Shillong and Cherra Punji; very common.

406. H. festivaria (Fabr.), Ent. Syst., iii., 2, 152, 84 (1793).

Geometra saturataria, Walker, xxii., p. 519 (1861). Cherra Punji.

407. H. iris (Butler), Ann. Mag. N. H. (5), vi., p. 122 (1880).

Cherra Punji.

Genus Achrosis, Guén.

408. A. quadraria, Warren, P. Z. S., 1893, p. 409. Cherra Punji.

Genus Prionia, Hübner.
Osicerda, Walker.
Celesdera, Walker.
Ismisca, Walker.
Zomia, Moore.

409. P. incitata (Walker), xxiv., p. 1085 (1862).
Zomia miscella, Swinh., Trans. Ent. Soc., 1891, p. 144.
Shillong and Cherra Punji.

410. *P. squalidaria*, Hübner, Zutr., iv., p. 40, figs. 787, 788, \(\chi \) (1832).

P. squalidaria, Cotes and Swinh., Cat. Moths of India, iv., No. 3691 (1888).

Ismisca cyclogonata, Walker, xxvi., p. 1765 (1862). Shillong; a fine series.

411. P. costimaculata (Moore), P. Z. S., 1867, p. 650. Shillong.

412. P. trinotaria (Moore), l.c. Cherra Punji; one example, much smaller than usual.

413. P. intexta (Swinh.), Trans. Ent. Soc., 1892, p. 145, pl. 8, fig. 11.

Genus Heteromiza, Warren.

414. H. flava (Moore), Descr. Ind. Lep. Atk., iii., p. 233, pl. 8, fig. 5 (1887).

415. H. sanguiflua (Moore), l.c., fig. 4. Shillong.

416. *H. cruentaria* (Moore), P. Z. S., 1867, p. 616. Cherra Punji.

Genus Nadagara, Walker.

417. N. inordinata, Walker, xxiv., p. 1094 (1862).

Shillong. The type from Sarawak is in the O. M. I have received two males from Shillong which are identical with Bornean and Maylayan specimens.

Genus Eilicrinia, Hübner.

418. E. flava (Moore), Descr. Ind. Lep. Atk., iii., p. 233, pl. 8, fig. 2 (1887).

Shillong.

Genus Spilopera, Warren. Erinnis, Warren.

419. S. umbrata, Warren, P. Z. S., 1893, p. 403. Cherra Punji.

Closely allied to S. gracilis, Butler, from Japan, uniformly smaller, and differing in the disposition of the bands.

420. S. hepaticata, sp. n.

\$\delta\$. Chocolate-brown, wings smeared with whitish in parts, a black dot at the end of each cell, forewings with a straight transverse brown line one-third from base, an irregular sinuous brown line from costa of forewings near apex to hinder margin, one-fourth from the angle, continued on the hindwings, where it is discal and curved, corresponding to the curves of the outer margin, the portion of the wings outside this line is darker and suffused towards the apex of forewings with a red tint, and there is a white smear on the outer margin below the apex and another smear in the disc below it. Underside paler, uniform in colour, suffused with grey, the cell dots distinct and both wings crossed by a discal sinuous chocolate line. Expanse of wings, 1.50 inch.

Cherra Punji; two examples.

421. S. combusta, Warren, P. Z. S., 1893, p. 415. Cherra Punji.

422. S. obliquilinea (Moore), Descr. Ind. Lep. Atk., iii., p. 229 (1887).

Leptomiza straminea, Warren, P. Z. S., 1893, p. 407, φ .

Shillong and Cherra Punji.

The type of Warren's genus Leptomiza is calcearia, Wk. Of the three new species he describes in the same paper all are from female types, and it is impossible to tell what genus they really belong to until the males are examined; ont of one hundred and seventy-four new species described in this paper, no less than fifty-four are erected on female types, and of many of them he appears to have had only single specimens before him.

Genus Fascellina, Walker.

423. F. chromotaria, Walker, xx., p. 215, 9 (1860). Geometra usta, Walker, xxxv., p. 1602, 3 (1866). Shillong and Cherra Punji; common.

424. F. plagiata (Walker), xxxv., p. 1601 (1866).
F. viridis, Moore, P. Z. S., 1867, p. 79, pl. 7, fig. 4. Shillong.

425. F. subsignata, Warren, P. Z. S., 1893, p. 399.

F. curtaca, Swinh., Ann. Mag. N. H. (6) xii., p. 220 (1893).

Shillong.

- 426. F. dacoda, Swinh., l.c., p. 221. (Pl. II., fig. 7.) Shillong and Cherra Punji.
- 427. F. cyanifera, sp. n. (Pl. II., fig. 13.)
- ¿ ♥. Chocolate-brown suffused with ochreous, and smeared and striated in parts with white; forewings with two indistinct brownish transverse straight bands, first one-third from base, second in the middle; a thin white line, edged with brown on both sides, and more or less sinuous, extending from a white subapical patch on costa of forewings to hinder margin, one-fifth from the angle, and continued across the disc of the hindwings, where it is bent at its centre; inside this line on the hindwings is a broad chocolate-brown band, and outside it on both wings are several white smears; on the underside the body, legs, and wings are ochreous, wings striated with brown, suffused with white and yellow on forewings, uniformly bright ochreous on hindwings; on the forewings, a white line edged with brown runs from the costa of forewings where it is deeply elbowed outwards, and then nearly straight down to the hinder angle, one-third from the angle, a broad reddish-brown band on its innerside, narrowing downwards, and all the wing outside the line of the same colour and smeared with white in parts; the hindwings are crossed by two discal brown lines, the inner one bent in its middle. Expanse of wing, $\sqrt{14}$, $\sqrt{15}$ inches.

Cherra Punji; one pair.

The female only differs from the male in having rounder wings.

Genus Orsonoba, Walker.

428. O. clelia (\$\tau\$) (Cram.), Pap. Exot., iii., p. 172, pl. 288, figs. B, c. (1780).

O. rajaca (3), Walker, xx., p. 219 (1860).

O. pallida, Butler, Ann. Mag. N. H. (5), vi., p. 125 (1880).

Cherra Punji.

Genus Hyposidra, Guén. Lagyra, Walker.

429. *H. talaca* (Walker), xx., p. 59, & (1860). Shillong.

430. *H. aquilaria* (Walker), xxvi., p. 1485 (1862). Shillong.

431. H. umbrosa (Swinh.), Trans. Ent. Soc. 1890, p. 203, pl. 7, fig. 4.

Macaria aquilaria (nom præoc.), Walker, xxvi., p. 1562 (1862).

Shillong.

Genus Hyalinetta, Nov.

¿. Differs from Hyposidra in having ciliated antennæ, not pectinated as in that genus; veins 3 and 6 of both wings emitted from the ends of the cells, the cells being closed by a hyaline mark bent outwards in the middle.

432. *H. megaspila* (Moore), P. Z. S., 1867, p. 616. Shillong.

Genus GARÆUS, Moore.

433. G. discolor, Warren, P. Z. S., 1893, p. 400. Shillong.

Genus Psyra, Walker.

434. P. cuneata, Walker, xxi., p. 483 (1860). Shillong and Cherra Punji.

Genus Crocallis, Treit.

Odontopera, Steph.

Corotia, Moore.

Niphonissa, Butler.

435. C. translineata (Walker), Char. Undescr. Lep. Het., p. 93 (1869).

Odontopera nemea, Swinh., Trans. Ent. Soc., 1891, p. 485, pl. 19, fig. 5.

Shillong.

Walker's type is in the Devon and Exeter Museum, and Mr. Warren, who has seen it, says it is identical with my type of nemea; Walker described his species as a Deltoid of the Genus Selenis.

436. C. cervinaria (Moore), P. Z. S., 1867, p. 625, pl. 32, fig. 10.

Shillong.

437. C. decorata (Moore), l.c., p. 621, pl. 32, fig. 9. Shillong.

438. C. codra (Swinh.), Trans. Ent. Soc., 1891, p. 486, pl. 19, fig. 8.

Shillong.

439. C. murina (Swinh.), l.c., p. 487, pl. 19, fig. 13. Shillong.

440. C. heydena, sp. n.

\$\delta\$. Dark ochreous grey, forewings densely irrorated with minute dark greyish-brown atoms, a brown dot at the end of the cell, indications of an inner brownish ontwardly-curved band at one-third from the base, a nearly straight blackish-brown thick line from the costa near apex to the hinder margin one-fourth from the angle, edged with whitish on the outer side, this line slightly curves inwards below its centre; black points in the interspaces close to the outer margin, cilia brown with pale tips, hindwings pale ochreousgrey, unmarked except for a pale grey dot at end of cell. Underside pale ochreous-grey, a blackish spot at end of each cell, and the discal line showing through the wing. Expanse of wings, 1-\frac{7}{10} inch.

Shillong; many examples.

Allied to *C. bilineata*, Swinh., which, however, is a larger insect, has a discal band on hindwings and has two teeth below its semi-falcated apex of forewing, a character entirely wanting in all the specimens I have yet seen of this species, the outer margin of the forewing being produced above the middle and evenly concave between that and the apex.

Genus Metrocampa, Latreille.

441. M. haliaria (Walker), xxii., p. 518 (1861). Shillong and Cherra Punji.

Genus Heterolocha, Led.

442. *II. patalata*, Felder, Reise Nov. Lep., pl. 132, fig. 9 (1874).

Marcala varians, Swinh., Trans. Ent. Soc., 1891, p. 487.

Shillong.

Genus CROCOTA, Hübn.

443. C. niguzaria, Walker, xx., p. 129 (1860). Shillong; many examples.

Genus Anthyperythra, Swinhoe.

444. A. hemearia, Swinh., Trans. Ent. Soc., 1891, p. 485, pl. 19, fig. 9.
Shillong.

Genus Hyperythra, Guén.

445. H. lutea, Cram., Pap. Exot., iv., pl. 370 figs. c, p. (1781).

Genus Pseuderythra, Nov.

Differs from Hyperythra in the absence of the sexual patch of androconia on forewing, the cell being longer in both sexes.

446. P. phænix (Swinh.), Trans. Ent. Soc., 1890, p. 489. Shillong; a long series.

447. P. khasiana (Swinh.), Ann. Mag. N. H. (6), xii., p. 221 (1893).

Shillong; many examples: the females of the above two species are rather difficult to distinguish from the females of *Hyperythera lutea*; they have, however, large purplish spots all along the outer side of the discal band on both wings, whereas in *lutea* these spots are duller coloured and more restricted; the cell also is shorter in *lutea*: from each other they can be separated by the difference in the colouration of the underside.

Genus Scardania, Guén.

448. S. metallaria, Guén., Phal., i., p. 89 (1857). Shillong and Cherra Punji.

Genus Peratophyga, Nov.

Antennæ of male with paired ciliations to the tips; of the female with very minute ciliations; palpi upturned, covered with hairs; bindwings with vein 4 curving downwards before end of cell, 2 emitted from middle of cell, 3 and 6 from the ends, forewing with

vein 3 from end of cell, 5 emitted from 6 beyond end of cell, mid tibia with two terminal spurs, hind tibia with four.

449. *P. xrata* (Moore), P. Z. S., 1867, p. 643. Shillong.

Genus Hypulia, Nov.

Q. Antennæ dilate, palpi upturned, last joint short, depressed, smooth; hindwings with vein 3 emitted before end of cell, 6 at the end, 2 beyond the middle; forewing with vein 3 before end of cell, 5 in the centre of discocellulars, 6 bent at its origin before upper end; hind tibiæ with two pairs spurs, one long and one short in each pair.

450. S. dirempta (Walker), xxii., p. 595 (1861).

Shillong and Cherra Punji: I have this species from several parts of India and from Singapore, all females, and have never seen a male.

Genus Pericallia, Stephens.

451. P. gynopteridia (Butler), Ann. Mag. N. H. (5), vi., p. 123 (1880).

Shillong and Cherra Punji; many examples of both sexes.

452. P. angulifascia (Moore), P. Z. S., 1878, p. 851, pl. 53, fig. 11.

Shillong; several males and one female. In this species vein 6 of the hindwings is emitted a little further inwards from the end of the cell then in *gynopteridia*, and the antennæ of the female has the pectinations very short and invisible to the naked eye.

Genus Epione, Dup.

453. E. adustata, Moore, l.c., pl. 8, fig. 20.

Type Khasia Hills in coll. Staudinger: not known to me.

. Genus Synegia, Guén.

Borbacha, Moore.

Parasynegia, Warren.

451. S. pardaria (Guén.), Phal., i., p. 420 (1857). Shillong.

455. S. camptogrammaria (Guén.), Phal., i., p. 420 (1857). Caberodes infivaria, Walker, xxvi., p. 1513 (1862). Shillong and Cherra Punji.

456. S. diffusaria (Moore), P. Z. S., 1867, p. 641.
Anisodes punctifera, Butler, Ann. Mag. N. H. (5), vi., p. 220 (1880).
Cherra Punji.

- 457. S. pluristriaria (Walker), xxvi., p. 1581 (1862). Shillong and Cherra Punji; common.
- 458. Synegia gopterana, sp. n.
- J. Ochreous, sparsely irrorated with red, thorax with a red band in front; abdomen with segmental bands, wings with a black dot at the end of each cell, hindwings with a short basal red band, and a corresponding thick red band near the base of the abdominal both wings crossed by a red band from the centre of the abdominal margin of hindwings, where it is double, to the apex of forewings, where it joins a band which curves from the apex to the costal third; on the forewings there is another curved band attached to the upper half of the medial band and a red mark against the centre of the outer margin, and on the hindwings there are some irregular red lines in the disc and a straight red band from the apex to the anal angle. Expanse of wings, 1-1°c inch.

Cherra Punji; two examples. Allied to S. lidderdalii, Butler.

Genus Corymica, Walker.

459. *C. arnearia*, Walker, xx., p. 231 (1860). Shillong.

460. C. caustolomaria, Moore, Descr. Ind. Lep. Atk., iii., p. 231 (1887).

Cherra Punji.

Section IV. MACARIINÆ.

Genus Luxiaria, Walker.

Bithia, Walker.

461. L. phyllosaria (Walker), xx., p. 82 (1860).L. alfenusaria, Walker, l.c., p. 232.Shillong.

462. L. contigaria (Walker), xxii., p. 754 \$ (1861).

Acidalia turpisaria, Walker, xxiii., p. 771 \(\) (1861). A. tephrosaria, Moore, P. Z. S., 1867, p. 643 \(\) \(\) .

Very common.

463. L. subrasata (Walker), xxiii., p. 773 (1861).

Shillong and Cherra Punji; a fine series.

Forewings very narrow; underside ochreous-brown with the usual markings brown, and with a white patch at apex of forewing.

464. L. submonstrata (Walker), xxiii., p. 772 (1861).

Shillong and Cherra Punji; many examples

The smallest species of the genus, of a pale grey colour.

465. L. fasciosa, Moore, Descr. Ind. Lep. Atk., iii., p. 254 (1887).

Shillong and Cherra Punji; common.

466. L. exclusa (Walker), xxi., p. 320 (1860).

L. exclusa, Cotes and Swinh., Cat. Moths of India, iv., No. 4006 (1888).

Acidalia inexactata, Walker, xxxv., p. 1600 (1866).

Shillong.

467. L. obliquata, Moore, Descr. Ind. Lep. Atk., iii., p. 254 (1887).

Shillong and Cherra Punji; many examples.

Genus Macaria, Curtis.

Acadra, Herr Schäff.

Evarzia, Walker.

Azata, Walker.

Gubaria, Moore.

Gonodela, Boisd.

468. M. emersaria (Walker), xxiii., p. 925 (1861). Shillong and Cherra Punji; common.

469. M. oliva, sp. n. (Pl. II., fig. 16.)

3. Olive grey, with slightly darker irrorations; wings crossed by olive brown lines, all bent in on to the costa of forewings, 1st

one third from base, on forewings only, 2nd medial, the bent portions near costa only distinguishable, 3rd discal; medial on hindwing, there is also a nearly straight line on hindwings, from apex to anal angle; a black quadrate patch divided by the veins on discal line of forewings above the centre, with some black markings near it, and three or four pure white spots below the apex; a brown smear like a transverse band on both wings before the middle; underside with irrorations and bands prominent and black. Expanse of wings, $1\frac{\pi}{100}$ inch.

Cherra Punji; many examples.

Allied to M. temeraria, Swinh. The pattern above somewhat resembles M. pryeri, Butler, from Japan.

470. M. temeraria (Swinh.), Trans. Ent. Soc., 1891, p. 492.

Shillong and Cherra Punji; very common.

471. M. postvittata Walker), xxiii., p. 759 (1861).

M. honoraria, Walker, l.c., p. 928.

M. permotaria, Walker, l.c., p. 929.

Shillong; three examples.

472. *M. vasudeva*, Walker, xxiii., p. 933 (1861). Shillong.

473. M. khasiana, Moore, Descr. Ind. Lep. Ath., iii., p. 269 (1887).

Shillong and Cherra Punji; the common form of the *sufflata* group in the Khasias, but I have never received it from any other locality.

474. M. azataria (Swinh.), Ann. Mag. N. H. (6), xii., p. 154 (1893).

Shillong; five males.

475. M. apataria (Swinh.), l.c., p. 222. Shillong and Cherra Punji; twelve males.

476. M. metagonaria (Walker), xxvi., p. 1518 (1862).

Common; in the B. M. Coll. this is made a synonym of S. elvirata, Guén., but elvirata belongs to the sufflata group. I have it from the Shan States; it is the largest species of that group.

477. M. xanthonora, Walker, xxiii., p. 935 (1861). Shillong; mauy examples.

478. M. inchoata, Walker, xxiii., p. 931 (1861).

M. nora, Walker, l.c., p. 934.

M. neonora, Walker, l.c.

Very common; neonora is from the Philippines, it has the central white band very broad, but I have an example from the Khasias identical with the type. The type specimen of inchoata is a female; some females of this extreme form look very distinct, but among the many hundreds in my museum, from many localities, there are all three forms with all the gradations between them.

479. M. fasciata (Fabr.), Syst. Ent., p. 629 (1775).

Shillong; appears to be more rare in the Khasias than any other species of this group, only three or four examples having been received.

480. M. acutaria, Walker, Char. Undescr. Lep. Het., p. 100 (1869).

Shillong and Cherra Punji; many examples. There are two distinct forms of this species, one much darker than the other.

481. M. perspicuaria, Moore, P. Z. S., 1867, p. 647.

Shillong and Cherra Punji; common.

482. M. odataria (Swinh.), Ann. Mag. N. H. (6), xii., p. 154 (1893). (Pl. II., fig. 17.)

Shillong; five examples.

483. M. trilinearia (Moore), Descr. Ind. Lep. Atk., iii., p. 263 (1887).

Shillong.

484. M. quadraria (Moore), Lep. Ceylon, iii., p. 469, pl. 205, fig. 1 (1887).

Azata ferruginata, Moore, l.c., p. 470, fig. 2.

Shillong; many examples.

485. M. subfasciata (Hampson), Ill. Typ. Lep. Het. B. M., viii., p. 112, pl. 151, fig. 20 (1891).

Shillong; nine examples.

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Genus Tephrina, Guón.

486. T. atmala, sp. n.

 \mathcal{J} . Dark slaty-brown, forewings with the costa tinged with ochreous, a large black spot at the end of the cell, three transverse black lines antemedial, medial, and discal, the first acutely bent outwards below the costa, second curving outward from the costa round the discal spot, third curving a little outwards from the costa, sinuate, pale edged outwardly and continued across the middle of the hindwings; underside paler, striated with whitish, with medial and discal darker thin bands, which on the hindwings are antemedial and medial. Expanse of wings, $1_{\frac{1}{10}}$ inch.

Cherra Punji; one example.

Genus Cassyma, Guén.

Eutwa, Walker.

Nustidava, Walker.

487. C. heteroneurata, Guén., Phal. iii., p. 19 (1857).

Eutwa personaria, Walker, xx., p. 217 (1860).

Nustidava unilineata, Walker, xxvi., p. 1573 (1862).

Shillong and Cherra Punji. I have it also from Sikkim.

Genus Krananda, Moore.

488. K. semihyalina, Moore, P. Z. S., 1867, p. 648. Shillong; a fine series.

Genus ZAMARADA, Moore.

489. Z. translucida, Moore, Lep. Ceylon, iii., p. 432, pl. 197, fig. 2 (1887). Cherra Punji.

490. Z. cosmiaria, Swinh., Ann. Mag. N. H. (6), xii., p. 155 (1893). (Pl. II., fig. 3.) Shillong and Cherra Punji.

491. Z. (?) marginata, Warren, P. Z. S., 1893, p. 388, pl. 32, fig. 22.
Cherra Punji.

Genus Zeheba, Moore.

492. Z. marginata (Walker), xxxv., p. 1561, ♀ (1866). Hydata spectabilis, Butler, P. Z. S., 1877, p. 474. Z. aureata, Moore, Descr. Ind. Lep. Atk., iii., p. 263, & (1887).

Cherra Punji.

Section V. ABRAXINÆ. Zereninæ.

Genus Cistidia, Hübner. Halthia, Mén. Obeidia, Walker.

493. C. nigripars (Swinh.), Trans. Ent. Soc., 1892, p. 16, pl. 1, fig. 1.

Shillong; one example.

494. C. lucifera, sp. n.

Types, India, ♂ ♀ in O. M.

Shillong; one female. I have it also from Sikkim. Differs from *C. tigrata* in its smaller size, and the colour of the wings being pure white instead of ochreous.

Genus Paricterodes, Warren.

495. *P. tenebraria* (Moore), P. Z. S., 1867, p. 653. Shillong.

Genus Icterodes, Butler.

496. I. hamiltonia (Swinh.), Trans. Ent. Soc., 1892, p. 17, pl. 1, fig. 15.

Shillong.

497. I. lapsariata (Walker), xxiv., p. 1121 (1862). Cherra Punji.

498. I. fasciata, sp. n. (Pl. II., fig. 11.) ♀.

3 9. Pectus, palpi beneath and shafts of the antennæ ochreous, plumes and upper side of palpi black, abdomen ochreous with black spots, wings white with broad grey transverse bands, one at

the base where there are some ochreous marks, an incomplete band in the middle, obsolescent in the hindwings, followed by a broad discal band across both wings, and an almost equally broad marginal band with a white sinuous line running down its centre. Body and legs below ochreous. Expanse of wings, 2 inches.

Cherra Punji. I have it also from Kurseyong.

Genus Calcula, Moore.

499. C. exanthemata, Moore, Descr. Ind. Lep. Atk., iii., p. 266 (1887).

Shillong.

Genus Abraxas, Leach.

500. A. leopardina (Kollar), Hüg. Kasch., iv., p. 490 (1848).

A. martaria, Guén., Phal. ii., p. 205 (1857). A. intermedia, Warren, P. Z. S., 1888, p. 324.

Shillong and Cherra Punji; very common: it is impossible to separate the above three. Amongst the hundreds I have received from the Khasias there are typical examples of all three, and very many intergrades; it is a species very variable in both pattern and size.

501. A. khasiana, Swinh., Trans. Ent. Soc., 1892, p. 17. Shillong; five examples.

Genus Percnia, Guén.

502. P. felinaria, Guén., Phal., ii., p. 216, pl. 19, fig. 1 (1857).

Common; I have two or three curious sports of this species from Cherra Punji.

503. P. belluaria, Guén, l.c., p. 217.

Very common.

504. P. guttata, Felder, Reise Nov. Lep., pl. 130, fig. 15 & (1874).

P. submissa, Warren, P. Z. S., 1893, p. 391.

Shillong; three examples. I have it also from Simla and Kurseyong, the antennæ of the male is quite different in this species to that in *felinaria* or *bell-naria*, having well separated thick spine-like branches densely ciliated.

505. P. coryneta, sp. n.

 \mathfrak{F} . White, pectus, top of head and thorax ochreous; abdomen grey tinged with ochreous; the two latter with black spots as in Percnia; forewings ochreous at the base, both wings with spots much as in P. felniaria, but there are black streaks at the base of voins 3, 4, 5 and 6 of the forewings, and the sub-marginal row of spots are in pairs, except those in the 2nd and 3rd interspaces; and these spots being somewhat near the margin they leave a white discal band between them, and the central duplex row; in the hindwing the central band of spots are in pairs in the middle, being near the origin of veins 3 and 4, and 6 and 7, these being emitted from the lower and upper ends of the cell. Expanse of wings, $2\frac{8}{10}$ inch.

Shillong; one example.

Genus Milionia, Walker.

506. M. pulchrinervis, Felder, Reise Nov. Lep., pl. 104, fig. 6 \,\text{9} (1868).

M. lativitta, Moore, P. Z. S., 1872, p. 570. Shillong.

Section VI. BOARMIINÆ.

Genus Amraica, Moore.

507. A. recursaria (Walker), xxi., p. 374 ♀ (1860).

Boarmia ferrolavata, Walker, xxvi., p. 1536 \(\frac{1862}{1862} \).

B. solivagaria, Walker, xxxv., p. 1586 \(\rm \) (1866).

A. fortissima, Moore, Descr. Ind. Lep. Atk., iii., p. 245 \(\frac{1}{3} \) (1887).

Shillong; a fine series. The above is a very good instance of the futility of erecting types on female examples in the Geometers: the above three females all vary *inter se*, but are all undoubtedly one species, easily proved by the examination of a long series of this species.

Genus Eubyja, Hübn.
Amphidaris, Treit.

508. E. regalis (Moore), Descr. Ind. Lep. Atk., iii., p. 234 (1887).

Shillong.

Genus Cusiala, Moore.

509. C. bengalaria (Guén.), Phal., i., p. 210, pl. 4, fig. 2 (1857).

Shillong; many examples of both sexes.

510. C. contectaria (Walker), xxvi., p. 1529 (1862). Shillong and Cherra Punji.

511. *C. angulata* (Hampson), Ill. Typ. Lep. Het. B. M., viii., p. 107, pl. 150, fig. 7 (1891). Cherra Punji.

Genus Buzura, Walker.

512. B. suppressaria (Gnén.), Phal., i., p. 210 (1857).
B. multipunctaria, Walker, xxvi., p. 1531 (1862).
B. strigaria, Moore, P. Z. S., 1879, p. 416.
Shillong and Cherra Punji; common.

Genus Chorodna, Walker.

513. C. erebusaria, Walker, xxi., p. 314 (1820). Shillong and Cherra Punji.

514. C. metaphæaria (Walker), xxvi., p. 1482 (1862).
Erebomorpha semiclusaria, Walker, l.c., p. 1552.
E. prætextata, Felder, Reise Nov. Lep., pl. 126, fig. 16 (1874).
Shillong.

C. testaceata (Moore), P. Z. S., 1867, p. 615.
 Cherra Punji.

Genus Erebomorpha, Walker. Vindusara, Moore.

516. E. fulgurita, Walker, xxi., p. 495 (1860).
 E. wanthosoma, Felder, Reise Nov. Lep., pl. 126, fig. 17 (1874).

Shillong; many examples.

517. E. fulguraria, Walker, xxi., p. 495 (1860). Shillong; seven examples. 518. *E. compositata* (Guén.), Phal. ii., p. 207 (1857). Common.

Genus Opthalmodes, Guén.

519. O. herbidaria, Guén., Phal., i., p. 283 (1857).

O. diurnaria, Guén., l.c., p. 284.

Boarmia pertusaria, Felder, Reise Nov. Lep., pl. 125, fig. 17 (1874).

Shillong and Cherra Punji.

520. O. infusaria, Walker, xxi., p. 448 (1860). Shillong and Cherra Punji; very common.

521. O. pulsaria, Swinh., Trans. Ent. Soc., 1891, p. 489. Shillong and Cherra Punji; many examples.

522. O. cordularia, Swinh., Ann. Mag. N. H. (6), xii.,
 p. 155 (1893). (Pl. II., fig. 4.)
 Shillong and Cherra Punji.

Genus Amblychia, Guén.

523. A. angeronaria, Guén., Phal., i., p. 215, pl. 4, fig. 9 (1857).
Shillong.

Genus Elphos, Guén.

524. E. hymenaria, Guén., Phal., i., p. 285, pl. 16, fig. 4 (1857).

E. pardicelata, Walker, xxvi., p. 1544 (1862).
 E. præumbrata, Warren, P. Z. S., 1893, p. 433 φ.

Shillong; common. Warren's species is erected on a female from Perak: in the Oxford Museum and in my own museum are examples from several parts of India, Borneo, Sumatra and Singapore, with many variations of females bearing many of the characters described by Warren.

525. E. scolopaiea, Drury, Exot. Ins., ii., pl. 22 fig. 1, App. ii. (1773).

Shillong; common.

Genus Boarmia, Treit.

526. B. admissaria, Guén., Phal. i., p. 239 (1857).

B. pleniferata, Walker, xxvi., p. 1538 (1862). Alcis vicina, Moore, Descr. Ind. Lep. Atk., iii., p. 243 (1887).

Shillong. A splendid series of this very variable species.

- 527. B. perspicuata, Moore, P. Z. S., 1867, p. 630. Shillong.
- 528. B. alienaria, Walker, xxi., p. 370, & (1860).

B. gelidaria, Walker, xxvi., p. 1537, ♀ (1862). Chogada fraterna, Moore, Descr. Ind. Lep. Atk., iii., p. 245 (1887).

Shillong and Cherra Punji; very common; a very widely distributed species: I have it from Sylhet, Sikkim, Khasias, Andamans, Nilgiris, and Ceylon.

- £29. B. propulsaria, Walker, xxi., p. 385 (1860).B. contiguata, Moore, P. Z. S., 1867, p. 631.Shillong and Cherra Punji; common.
- 530. B. semiclarata (Walker), xxiv., p. 1029 (1862). Shillong; many examples.
- 531. B. semialba (Moore), Descr. Ind. Lep. Atk., iii., p. 241 (1887).
 Cherra Punji.
- 532. B. latifasciata, Warren, P. Z. S., 1893, p. 427. Cherra Punji.
- 533. B. nebulosa, Swinh., Trans. Ent. Soc., 1891, p. 488. Shillong.
- 534. B. ratotaria, sp. n. (Pl. II., fig. 18.)
- 3. Brown; the colour caused by minute brown irrorations densely packed on a grey ground; wings with a lunular-shaped ringlet at the end of each cell, and crossed by several dark-brown lines, 1st one-third from base, and indistinct; 2nd medial, outwardly dentated, regularly curved on hindwing outside the ringlet,

double on forewing, the two lines gradually widening on to the costa; 3rd discal somewhat close to the margin, more or less ontwardly dentated, and edged in places with whitish on its outer side, marginal sinuous line dark brown; underside pale brown, discal ringlets and central thick black transverse line prominent on both wings. Expanse of wings, $1\frac{6}{10}$ inch.

Shillong and Cherra Punji; many examples. Allied to *B. gemmaria*, Brahm., but differs in the absence of the discal marks, evanescent bands above, and band on hindwings more elbowed outwards.

Genus RACOTIS, Moore.

535. R. boarmiaria (Guén.), Phal. i., p. 282 (1857).

Shillong and Cherra Punji. There are two forms, one darker and smaller than the other. It is a very common species in the Khasias.

Genus Xandrames, Moore.

536. X. dholaria, Moore, P. Z. S., 1867, p. 634. Shillong and Cherra Punji.

537. X. latiferaria (Walker), xxi, p. 445 (1860).

Shillong. Six males. The type came from N. China, but these specimens appear to be identical with the type.

Genus MEDASINA, Moore.

538. M. strixaria (Guén.), Phal. i., p. 217 (1857).
Shillong.

539. M. creataria (Guén.), l.c.

Shillong and Cherra Punji; common.

540. M. mauraria (Guén.), l.c., p. 218.

Shillong and Cherra Punji. In Cotes and Swinhoe's "Moths of India," No. 3264, M. parisnatei (Walker) is put as a synonym of the above. But this is not correct; parisnatei is uniformly much larger than mauraria, and has a large pale-yellowish spot in the centre of the outer margin of the forewings in both sexes, besides other differences. I have both sexes from the Chin Hills, and many examples of both sexes of mauraria from the Khasias.

541. M. nigrovittata (Moore), P. Z. S., 1867, p. 626. Shillong and Cherra Punji.

Genus Callocasta, Nov.

- 3. Antennæ bipectinated to the tips, pectinations densely ciliated; hindwing with vein 2 emitted from the centre, 3 from a little before end of cell, vein 6 from the upper end; forewing with vein 2 from the centre, 3 from before the end of the cell, 6 bent upwards beyond the upper end of the cell, emitting vein 5 at a little distance beyond; hind tibia with two pairs of spurs.
- 542. C. similis (Moore), Descr. Ind. Lep. Atk., iii., p. 235 (1887).
- 543. C. basistrigaria (Moore), P. Z. S., 1867, p. 626. Shillong; one female.

Genus Pseudangerona, Moore.

- 544. P. separata (Walker), xxi., p. 381 (1860).
 Boarmia retractaria, Walker, l.c., p. 386.
 B. intectaria, Walker, xxvi., p. 1535 (1862).
 Shillong and Cherra Punji; many examples.
- 545. P. reparata (Walker), xxi., p. 380 (1860). Shillong; five examples.
- 546. P. lectularia (Swinh.), Trans. Ent. Soc., 1891, p. 489, pl. 19, fig. 4.
 Shillong; one example.

Genus Catascia, Hübn.

- 547. C. eolaria (Guén.), Phal., i., p. 294 (1857). Shillong and Cherra Punji; common.
- 548. C. ventraria (Guén.), Phal., l.c. Shillong and Cherra Punji; common.

Genus Catoria, Moore.

549. C. sublavaria (Guén.), Phal., i., p. 256 (1857).

C. olivescens, Moore, Descr. Ind. Lep. Atk., iii., p. 244 (1887).

Shillong and Cherra Punji. A fine series; typical examples of *sublavaria* and *olivescens* look very distinct, but I have many intergrades.

Genus Darisa, Moore.

550. D. mucidaria (Walker), xxxv., p. 1581 (1866). Shillong and Cherra Punji.

Genus Lassaba, Moore.

L. albidaria (Walker), xxxv., p. 1582 (1866).
 Shillong.

Genus Hemerophila, Steph. Menophra, Moore.

- 552. *H. delineata* (Walker), xxi., p. 387, ♀ (1860). *H. canidorsata*, Walker, xxxv., p. 1578 (1866). Shillong.
- 553. H. retractaria, Moore, P. Z. S., 1867, p. 627, pl. 32, fig. 7.Shillong.
- 554. H. humeraria, Moore, l.c., p. 627. Shillong.
- 555. H. contubernalis (Moore), Descr. Ind. Lep. Atk., iii., p. 238 (1887).

Shillong.

556. H. vialis (Moore), Descr. Ind. Lep. Atk., iii., p. 238, pl. 8, fig. 9 (1887).Cherra Punji.

Genus Hirasa, Moore.

557. H. scripturaria (Walker), xxxv., p. 1590 (1866). Scotopteryx permuscosa, Warren, P. Z. S., 1893, p. 432. Cherra Punji.

Genus Ruttellerona, Nov.

Antenuæ of male with short paired bristles; hindwing with cell open, vein 2 at less than one-third from end, rather close to 3; forewing with veination normal, vein 5 in centre of disco-cellulars; mid tibia with one pair terminal spurs; hind tibia with two pairs, the inner pair the longer.

558. R. cessaria (Walker), xxi., p. 383, & (1860).

Angerona præclaria, Walker, xxvi., p. 1499, \(\rho \) (1862).

A. pallicostaria, Moore, P. Z. S., 1867, p. 620.

Shillong and Cherra Punji; common.

559. R. figlina (Swinh.), Trans. Ent. Soc., 1890, p. 205, pl. 7, fig. 5.
Shillong and Cherra Punji.

Genus Gyadroma, Nov.

- 3. Antennæ fasciculate; palpi upturned, first two joints covered with long hairs, last joint short and depressed; wings long, rather narrow; forewing with costa slightly arched, outer margin much rounded; hindwing with outer margin produced and scalloped, both wings with veins 3 and 6 emitted before ends of cells; hind tibia thick, with two pairs of short stout spurs and fringed with long hairs.
- 560. G. testacearia (Moore), P. Z. S., 1867, p. 623. Shillong and Cherra Punji; in great numbers.

Genus Serraca, Moore.

561. S. transcissa (Walker), xxi., p. 380 (1860). Shillong and Cherra Punji.

Genus Astacuda, Moore.

562. A. cineracca, Moore, Descr. Ind. Lep. Δtk., iii.,
 p. 244 (1887).
 Shillong.

563. A. ampla, Moore, l.c. Cherra Panji.

Genus Ectropis, Hübn.

564. E. dentilineata (Moore), P. Z. S., 1867, p. 631. Shillong and Cherra Punji.

565. E. pallidaria (Moore), Descr. Ind. Lep. Atk., iii., p. 237 (1887). (Pl. II., fig. 12.)

Pseudocoremia dendrellaria, Swinh., Ann. Mag. N. H. (6), xii., p. 156 (1893).

Shillong.

566. E. pannosaria (Moore), P. Z. S., 1867, p. 629.
Shillong.

567. E. simplaria, sp. n.

 \mathcal{J} . Grey, irrorated with black atoms; abdomen with black dorsal bands, the last two or three duplex; wings crossed by black sinuous and semi-dentate transverse lines, ante-medial, medial, and post-medial, these lines more or less furnished with black points, marginal lunules black; cilia yellowish-grey, with black streaks opposite the veins. Expanse of wings, $\mathbf{1}_{To}^{\mathrm{T}}$ inch.

Cherra Punji.

568. E. planaria, sp. n.

 $\[\vec{\sigma} \]$. Grey, striated with brown; the striations thick on the apical portions of the forewings, making them much darker than the rest of the wings; a black lumule at the end of each cell; a sinuated ante-medial transverse brown line more distinct on the hindwings; another similar medial line, bent outwardly on forewings before reaching the costa, an indistinct, pale, very sinuous discal line and marginal black festoon; cilia yellowish-grey, with dark grey patches; underside grey, with the medial line very distinct. Expanse of wings, $1\frac{3}{10}$ inch.

Cherra Punji and Shillong.

Allied to E. ochrifasciata, Moore, Lep. Atk., iii., p. 240, but quite distinct.

Genus Ascotis, Hübn.

569. A. selenaria (Schiff.), Wien. Verz., p. 101.

Boarmia reciprocaria, Walker, xxi., p. 366 (1860).

B. imparata, Walker, l.c., p. 372.

B. promptaria, Walker, l.c., p. 379.

Ophthalmodes cretacea, Butler, Ann. Mag. N. H., ii., p. 373 (1879).

Shillong and Cherra Punji; common. A very widely-spread species occurring in Africa, India, China and Japan.

Genus Anonychia, Warren.

570. A. grisea, Butler, P. Z. S., 1883, p. 172. Shillong and Cherra Punji.

Genus Arichanna, Moore.

571. A. tramesata, Moore, P. Z. S., 1867, p. 658, pl. 33, fig. 2.

Shillong.

572. A. marginata, Warren, P. Z. S., 1893, p. 423.
Shillong.

573. A. transfasciata, Warren, P. Z. S., 1892, p. 425. Cherra Punji.

Genus Scotopteryx, Hübn.

574. S. albistellaria, Warren, P. Z. S., 1893, p. 432. Type Khasia Hills in collection Elwes.

Genus Orbasia, Nov.

Antennæ of both sexes simple; hindwing with vein 4 much bent upwards towards end of cell, 2 emitted beyond the middle, 3 before the end, 6 at the upper end; forewing with vein 2 at one-third before end, 3 before the end of the cell, 5 from just above centre of disco-cellular, 6 before upper end of cell; hind tibia with one pair of stout terminal spurs.

575. O. spurcataria (Walker), xxvi., p. 1498 (1862). Shillong; one female.

Genus Psilalcis, Warren.

576. P. breta, Swinh., P. Z. S., 1889, p. 426.

Shillong; in Ill. Typ. Lep. Het. B. M., ix., p. 36, Hampson makes breta a synonym of inceptaria, Walker, the type of which is a unique and very much rubbed

female example from Flores, in the Oxford Museum. This is mere conjecture; Flores is a long way from India, and the type specimen is too much rubbed for identification: it does not even resemble breta, and until we can find a male we cannot be certain it even belongs to the same genus as breta. On this rubbed female Warren states he has erected his genus Psilalcis; but he has erected his genus on a male, and as the male of inceptaria is not known, that species cannot stand as the type of the genus,

EXPLANATION OF PLATE II.

- 1. Ocinara cyproba, p. 154.
- 2. Eupterote axesta, p. 157.
- 3. Zamarada cosmiaria, p. 210.
- 4. Opthalmodes cordularia, p. 215.
- 5. Stegania peralba, p. 195.
- 6. Absala dorcada, p. 170.
- 7. Fascellina dacoda, p. 201.
- 8. Myrteta ocernaria, p. 194.
- 9. Episothalma ocellata, p. 172.
- 10. Eustroma monana, p. 191.
- 11. Icterodes fasciata, p. 211.
- 12. Ectropis pallidaria, p. 221.
- 13. Fascellina cyanifera, p. 201.
- 14. Deilinia luteifrons, p. 193.
- 15. Tanaorhinus kina, p. 174.
- 16. Macaria oliva, p. 207.
- 17. Macaria odataria, p. 209.
- 18. Boarmia ratotaria, p. 216.